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Task Analysis and Workload Prediction Model of the MH-60K Mission and a Comparison with UH-60A Workload Predictions

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Volume III: Appendixes H through N

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19. ABSTRACT (Continue on reverse if necessary and identify by block number) <p>For this research, a mission scenario was used to conduct a comprehensive task analysis for MH-60K operations. The analysis used a top-down approach to identify 5 phases, 15 segments, 71 functions, and 230 tasks for the mission. Also, the crewmember performing each task was identified, and estimates of the task durations and the sensory, cognitive, and psychomotor workload associated with the tasks were derived.</p> <p>The mission/task/workload analysis data were used to develop a computer model of workload for MH-60K crewmembers. The model used a bottom-up approach to build mission functions from tasks and mission segments from functions. Decision rules were written to specify the procedure for combining tasks into functions and functions into segments. The model permitted an analysis of total workload experienced by the pilot and copilot in the performance of both sequential and concurrent tasks. The predicted workload for the MH-60K pilot and copilot was compared to the UH-60A baseline workload prediction to determine the impact of the</p> <p>(Continued)</p>					
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MH-60K advanced technology. The comparison indicated very little difference in the predicted workload for the pilot and lower predicted workload for the co-pilot in the MH-60K.



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TASK ANALYSIS AND WORKLOAD PREDICTION MODEL OF THE MH-60K MISSION
AND A COMPARISON WITH UH-60A WORKLOAD PREDICTIONS; VOLUME III:
APPENDIXES H THROUGH N

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TASK ANALYSIS AND WORKLOAD PREDICTION MODEL OF THE MH-60K
MISSION AND A COMPARISON WITH UH-60A WORKLOAD PREDICTIONS
VOLUME III: APPENDIXES H THROUGH N

INTRODUCTION

This three-volume report describes the methodology used to conduct a comprehensive task analysis of the MH-60K mission and the results of the analysis. Information provided by the MH-60K mission/task/workload analysis was used to establish a data base and to develop a computer model that predicts workload for the MH-60K pilot and copilot. Assessments of workload produced by the model are compared with the UH-60A baseline model to assess the impact on workload of the high technology modifications made in the MH-60K aircraft. The complete explanation of the Task Analysis/Workload (TAWL) methodology for performing the mission/task/workload analysis is contained in Volume I of this report. Volume II presents the results of exercising the UH-60H workload and the task analysis of the MH-60K mission scenario.

The appendixes in Volume III present the decision rules for construction of the MH-60K workload prediction model and the results from exercising the model. The information presented in Appendixes H through K is specified below:

- Appendix H presents the MH-60K Function Summary Worksheets,
- Appendix I presents the MH-60K Function Decision Rules Worksheets,
- Appendix J presents the MH-60K Segment Summary Worksheets, and
- Appendix K presents the MH-60K Segment Decision Rules Worksheets.

The graphs in Appendixes L and M present the workload predictions for the pilot and copilot for each of the 15 MH-60K mission segments. The graphs present the total workload for each of the six components for all tasks the crewmember is performing during each half-second of the mission segment. The diamond symbol at the end of each graph indicates the average workload of the component for the segment.

The lists of MH-60K and UH-60A segments and functions used for workload comparison are in Appendix N. The results of the comparisons are presented in Volume I of this report.

A P P E N D I X H

MH-60K FUNCTION SUMMARY WORKSHEETS

This appendix contains the Function Summary Worksheets for each of the 71 functions. The summary worksheets identify and list the tasks to be performed by the pilot and copilot. For each crewmember, separate columns are used to identify discrete fixed, discrete random, continuous fixed, and continuous random tasks. The spatial arrangement of the tasks on the worksheet corresponds roughly to the temporal arrangement of the tasks within the functions.

FUNCTION 01 Adjust Approach Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Control Altitude [NVG] (023) Control Rate of Descent [NVG] (175) Control Airspeed [NVG] (011) Control Heading [NVG] (102) Control Drift [NVG] (060)				

FUNCTION 02 Adjust Climb Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Control Altitude [NVG] (023) Control Rate of Climb [NVG] (174) Control Airspeed [NVG] (011) Control Heading [NVG] (102)				

FUNCTION 03 Adjust Flight Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Control Altitude [NVG] (023)				
			Adjust Altitude [NVG] (015)				
			Control Airspeed [NVG] (011)				
			Adjust Power [NVG] (166)				
			Adjust Heading [NVG] (101)				
			Adjust Trim [NVG] (208)				
			Maintain Obstacle Clearance [NVG] (159)				

FUNCTION 04 Adjust Level of Flight Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Control Altitude [NVG] (023) Control Altitude [NVG] (016) Control Airspeed [NVG] (011) Control Heading [NVG] (102)				

FUNCTION 05 Adjust Map Display (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
							Check Map Display Scale (129) Press RING UP Key (181) Press RING DOWN Key (179) Press DECENTER Key (056) Press CENTER Key (037)

FUNCTION 06 Adjust Map Display (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Check Map Display Scale (129) Press RNG UP Key (181) Press RNG DOWN Key (179) Press DECENTER Key (056) Press CENTER Key (037)				

FUNCTION 07 Align Navigation Systems

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press SYST Key (2) (195)			
				Press NAV Key (2) (151)			
				Press NAV INIT Key (2) (150)			
				Enter CDU Data (036)			
				Press NORM Key (2) (154)			
				Press INIT Key (2) (114)			
				Press INS NAV Key (2) (115)			
				Press GPS INIT Key (2) (095)			
				Press AHRS NORM Key (2) (007)			
				Press AHRS NAV Key (2) (006)			
				Press INIT Key (2) (114)			
				Press NAV Key (2) (151)			
				Press GPS DOP Key (2) (094)			
				Press HSD Key (2) (107)			

FUNCTION 08 Boresight FLIR

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press FLIR CTRL Key (2) (075)			
				Check FLIR ON Key (2) (078)			
				Press NEXT Key (2) (153)			
				Press BORE Key (2) (030)			
				Press CALC Key (2) (033)			
				Press FOV NAR Key (2) (083)			
				Press NEXT Key (2) (153)			
				Press ADS SYM Key (2) (005)			
				Press RTN Key (2) (183)			

FUNCTION 09 Check Approach Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Check Rate of Climb Indicator (Inflight) (173) Check Airspeed (Inflight) (010) Check Heading (Inflight) (100)				

FUNCTION 10 Check Avionics System

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press WCA Key (2) (226) Press EQP STAT Key (2) (066) Press OP RDY Key (2) (160) Standby (191) Check EQP STAT Key (2) (065) Press RTN Key (2) (183)			

FUNCTION 11 Check Climb Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Check Rate of Climb Indicator (Inflight) (173) Check Airspeed (Inflight) (010) Check Heading (Inflight) (100)				

FUNCTION 12 Check Flight Instruments (Auto)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Check Altitude (013) Check Airspeed (008) Check Heading (098) Check Altitude (021)				

FUNCTION 13 Check Flight Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Check Altitude (Inflight) (014) Check Airspeed (Inflight) (010) Check % TRQ Indication (Inflight) (230) Check Heading (Inflight) (100) Check Trim Ball (Inflight) (207)				

FUNCTION 14 Check Level of Flight Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Check % TRQ Indication (Inflight) (230) Check Altitude (Inflight) (014) Check Airspeed (Inflight) (010) Check Heading (Inflight) (100)				

FUNCTION 15 Check Map Display System (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Check Map Display Scale (129) Press RNG UP Key (181) Press RNG DOWN Key (179) Press DECENTER Key (056) Press CENTER Key (037)			

FUNCTION 16 Check Map Display System (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Check Map Display Scale (129)							
Press RNG UP Key (181)							
Press RNG DOWN Key (179)							
Press DECENTER Key (056)							
Press CENTER Key (037)							

FUNCTION 17 Configure Flight Director

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Press SYST Key (4) (195) Press FPLN Key (4) (085) Press FPLN LOAD Key (4) (086) Press FPLN ON Key (4) (087) Press VSD Key (4) (225)							

FUNCTION 18 Configure Navigation Radios

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press F/D Key (2) (068)			
				Press NEXT Key (2) (153)			
				Press ADF Key (2) (004)			
				Press VOR TAC Key (2) (224)			
				Press HSD Key (2) (107)			
				Press NAV AIDS Key (2) (149)			
				Press TCN BRG Key (2) (202)			
				Press RTN Key (2) (183)			

FUNCTION 19 Depart Rendezvous [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Set Refuel Panel (177)			
				Transmit Message (Brief) (140)			
				Receive Acknowledgment (002)			
				Press VSD Key (1) (225)			
				Press IFF Key (1) (110)			
				Press BCN STBY Key (1) (028)			
				Press IFF STBY Key (1) (113)			
				Press SYST Key (1) (195)			
				Press FUEL/POWER Key (1) (091)			
				Check Fuel Summary (090)			
				Press VSD Key (1) (225)			

FUNCTION 20 Engage Level Flight (Auto)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press F/D Key (1) (068) Enter Airspeed (009) Enter BARO Altitude (026) Enter Heading (099) Press A/S SEL Key (1) (018) Press BALT SEL Key (1) (025) Press HDG SEL Key (1) (097) Press RTN Key (1) (183)			

FUNCTION 21 Establish Approach (NVG)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Check % TRQ Indication (Inflight) (230)							
Adjust Power [NVG] (166)							
Check % TRQ Indication (Inflight) (230)							
Press F/D Key (4) (068)							
Press HVR SYM Key (4) (108)							
Press RTN Key (4) (183)			Monitor Flight Controls (069)				

FUNCTION 22 Establish Climb [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Check % TRQ Indication (Inflight) (230)							
Adjust Power [NVG] (166)							
Check % TRQ Indication (Inflight) (230)							

FUNCTION 23 Establish Hover [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Adjust Power [NVG] (166) Check % TRQ Indication (Inflight) (230)							

FUNCTION 24 Establish Level of Flight [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Adjust Attitude [NVG] (022) Check % TRQ Indication (Inflight) (230) Adjust Power [NVG] (166)							

FUNCTION 25 Land Aircraft [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Perform Touchdown [NVG] (206)			Maintain Obstacle Clearance [NVG] (159)		Check Obstacle Clearance [NVG] (158)		
			Adjust Power [NVG] (166)				
			Control Altitude [NVG] (023)				
			Control Heading [NVG] (102)				
			Control Drift [NVG] (060)				

FUNCTION 26 Load Aircraft (Internal)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Monitor Loading (126) Verify Load Secure (125) Transmit Communication (Crewchief) (046) Receive Communication (Crewchief) (045)			

FUNCTION 27 Load Mission Plan

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Insert DTM Cartridge (061)			
				Check Bit Light (029)			
				Press SYST Key (2) (195)			
				Press MISSN LOAD Key (2) (142)			
				Press MISSN LOAD Key (2) (142)			
				Press LEGS Key (2) (122)			
				Verify Mission Loaded (141)			
				Press HSD Key (2) (107)			

FUNCTION 28 Mission Change

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Note Message Alert (138) Press SYST Key (1) (195) Press ATHS MENU Key (1) (020) Press DISP MSGS Key (1) (058) Read Message (135) Press RTN Key (1) (183)			

FUNCTION 29 Monitor Audio

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Monitor Audio (024)				Monitor Audio (024)	

FUNCTION 30 Monitor External Visual Field (Copilot) [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
						Check External Scene [NVG] (067)	

FUNCTION 31 Monitor External Visual Field (Pilot) [NVG]

P I L O T				C O P I L O T			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Check External Scene [NVG] (067)					

FUNCTION 32 Monitor Flight Controls

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Monitor Flight Controls (069)					

FUNCTION 33 Monitor FLIR Image (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
						Check FLIR Image (076)	

FUNCTION 34 Monitor FLIR Image (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Check FLIR Image (076)					

FUNCTION 35 Monitor RADAR Image (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
						Check RADAR Image (170)	

FUNCTION 36 Monitor RADAR Image (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Check RADAR Image (170)					

FUNCTION 37 Monitor Threat (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Check Direction Display (057)			

FUNCTION 38 Monitor Threat (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Check Direction Display (057)							
		Monitor Flight Controls (069)					

FUNCTION 39 Perform Aerial Refueling [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Verify Probe Hookup (167)				Transmit Message (Brief) (140)			
				Receive Message (136)			
				Transmit Acknowledgment (003)			
				Verify Probe Hookup (167)			
				Transmit Message (Brief) (140)			
Verify Probe Unhooked (168)				Receive Acknowledgment (002)			
				Press INST Key (1) (116)			
					Check Fuel Indicator (089)		
				Transmit Message (Brief) (140)			
				Receive Acknowledgment (002)			
				Verify Refueli. g Ceased (178)			
				Verify Probe 'Inhooked (168)			

FUNCTION 40 Perform After Landing Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press SYST Key (1) (195)			
				Press CHECK LISTS Key (1) (039)			
				Press SEQ Key (1) (186)			
				Press GET LIST Key (1) (092)			
				Check Radios (172)			
				Set TAILWHEEL Switch (199)			
				Check Tailwheel Advisory Light (198)			

FUNCTION 41 Perform Before Hover Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Check Rotor RPM (182) Press F/D Key (4) (068) Press HVR SYM Key (4) (108) Press RTN Key (4) (183) Perform HIT Check (106)							

FUNCTION 42 Perform Before Landing Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press SYST Key (1) (195)			
				Press CHECK LISTS Key (1) (039)			
				Press SEQ Key (1) (186)			
				Press GET LIST Key (1) (092)			
				Check Rotor RPM (182)			
				Check WCA Light (227)			
				Check Radios (172)			
				Check Park Brake (161)			
				Press F/D Key (2) (068)			
				Press A/S SEL Key (2) (018)			
				Press BALT SEL Key (2) (025)			
				Press HDS SEL Key (2) (097)			
				Press RTN Key (2) (183)			
				Check Tailwheel Advisory Light (198)			
				Press ASE Key (019)			
				Press MASTER Key (133)			
				Continued...			

FUNCTION 42 Perform Before Landing Check (Continued)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Check Crew (052) Receive Communication (Crewchief) (045) Press VSD Key (1) (225)			

FUNCTION 43 Perform Before Landing Check (LZ)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press SYST Key (1) (195)			
				Press CHECK LISTS Key (1) (039)			
				Press SEQ Key (1) (186)			
				Press GET LIST Key (1) (092)			
				Check Rotor RPM (182)			
				Check WCA Light (227)			
				Check Radios (172)			
				Check Park Brake (161)			
				Press F/D Key (2) (068)			
				Press A/S SEL Key (2) (018)			
				Press BALT SEL Key (2) (025)			
				Press HDS SEL Key (2) (097)			
				Press RTN Key (2) (183)			
				Check Tailwheel Advisory Light (198)			
				Press ASE Key (019)			
				Press MASTER Key (133)			
				Continued...			

FUNCTION 43 Perform Before Landing Check (LZ) [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Check Load Secure (124) Receive Communication (Crewchief) (045) Press VSD Key (1) (225)			

FUNCTION 44 Perform Before Takeoff Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Press INST Key (4) (116)				Press SYST Key (1) (195)			
Check Fuel Summary (4) (090)				Press CHECK LISTS Key (1) (039)			
Check Engine Display (4) (062)				Press CRJ Key (1) (186)			
Press VSD Key (3) (225)				Press GET LIST Key (1) (092)			
Check Vertical Situation Display (3) (220)				Press SYST Key (2) (195)			
Press DCLT Key (3) (055)				Press FPLN Key (2) (085)			
Press FLIR Key (3) (077)				Press FPLN ON Key (2) (087)			
Press FPV Key (3) (088)				Press HSD Key (2) (107)			
Press FOV Key (3) (082)				Press F/D Key (2) (068)			
Press POL Key (3) (164)				Press WYPT Key (2) (228)			
Press HSD Key (4) (107)				Press CRS Key (2) (053)			
Press RDR Key (4) (176)				Press RTN Key (2) (183)			
Press TA Key (4) (196)				Press WCA Key (2) (226)			
Press DCLT Key (4) (055)				Check CAUTION/ WARNING/Advisory Display (2) (035)			
				Press RTN Key (2) (183)			
				Continued...			

FUNCTION 44 Perform Before Takeoff Check [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Check Park Brake (161)			
				Check Radios (172)			
				Press ASE Key (019)			
				Press MASTER Key (133)			
				Press MAP Key (2) (131)			
				Press CTR Key (2) (054)			
				Press DCLT Key (2) (055)			
				Press VSD Key (1) (225)			
				Press RDR Key (1) (176)			
				Press TF Key (1) (203)			
				Press GM/TF Key (1) (093)			
				Press DCLT Key (1) (055)			
				Press CALT Key (1) (034)			
				Receive Communication (Crewchief) (045)			

FUNCTION 45 Perform Before Takeoff Check (LZ)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press SYST Key (1) (195)			
				Press CHECK LISTS Key (1) (039)			
				Press SEQ Key (1) (186)			
				Press GET LIST Key (1) (092)			
				Press INST Key (2) (116)			
				Check Fuel Summary (2) (090)			
				Check Engine Display (2) (062)			
				Press WCA Key (2) (226)			
				Check CAUTION/ WARNING/Advisory Display (2) (035)			
				Press RTN Key (2) (183)			
				Check Park Brake (161)			
				Check Radios (172)			
				Press ASE Key (019)			
				Press MASTER Key (133)			
				Receive Communication (Crewchief) (045)			
				Continued...			

FUNCTION 45 Perform Before Takeoff Check (LZ) [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press HSD Key (2) (107) Press VSD Key (1) (225)			

FUNCTION 46 Perform Before Taxi Check

PILOT				COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Check Crew (052) Receive Communication (Crewchief) (045) Release Park Brake (162)				Press SYST Key (1) (195) Press CHECK LISTS Key (1) (039) Press SEQ Key (1) (186) Press GET LIST Key (1) (092) Check Park Brake Light (163)		

FUNCTION 47 Perform Cockpit Communication (Copilot) (Coordination)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Receive Communication (Pilot) (Coordination) (047)				Transmit Communication (Copilot) (Coordination) (043)			
Transmit Communication (Pilot) (Coordination) (049)				Receive Communication (Copilot) (Coordination) (041)			

FUNCTION 48 Perform Cockpit Communication (Copilot) (Normal)

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Receive Communication (Pilot) (Normal) (048)				Transmit Communication (Copilot) (Normal) (044)			
Transmit Communication (Pilot) (Normal) (050)				Receive Communication (Copilot) (Normal) (042)			

FUNCTION 49 Perform Cockpit Communication (Pilot) (Coordination)

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Transmit Communication (Pilot) (Coordination) (049)				Receive Communication (Copilot) (Coordination) (041)			
Receive Communication (Pilot) (Coordination) (047)				Transmit Communication (Copilot) (Coordination) (043)			

FUNCTION 50 Perform Cockpit Communication (Pilot) (Normal)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Transmit Communication (Pilot) (Normal) (050)				Receive Communication (Copilot) (Normal) (042)			
Receive Communication (Pilot) (Normal) (048)				Transmit Communication (Copilot) (Normal) (044)			

FUNCTION 51 Perform External Communication (ATHS)

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press SYST Key (1) (195)			
				Press ATHS MENU Key (1) (020)			
				Press SEQ MSG Key (1) (187)			
				Enter Message (134)			
				Press Enter Key (064)			
				Press XMIT MSG Key (1) (229)			

FUNCTION 52 Perform External Communication (Frequency Change)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press COMM Key (1) (040)			
				Press UHF COMM Key (1) (214)			
				Press UHF LIST Key (1) (215)			
				Press SEQ CHAN Key (1) (185)			
				Press Tune VHF 1 Key (1) (210)			
				Press RTN Key (1) (183)			
				Transmit Message (Brief) (140)			
				Receive Acknowledgment (002)			
				Transmit Message (Brief) (140)			
				Receive Acknowledgment (002)			

FUNCTION : 3 Perform External Communication (Receive Coordination)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Receive Message Alert (139) Transmit Acknowledgment (003) Receive Message (136) Transmit Acknowledgment (003)			

FUNCTION 54 Perform External Communication (Transmit Code)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Transmit Message (137) Receive Acknowledgment (002) Transmit Message (137) Receive Acknowledgment (002)			

FUNCTION 55 Perform Hover Check [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Press INST Key (4) (116)			Control Altitude [NVG] (016)		Check Obstacle Clearance [NVG] (158)		
Check Flight Controls (Hover) [NVG] (070)			Control Altitude [NVG] (023)				
Check Engine Indications (Hover) (063)			Control Heading [NVG] (102)				
Check Flight Symbology Symbology (Hover) (074)			Control Drift [NVG] (060)				
Perform Power Check (Hover) (165)			Maintain Obstacle Clearance) [NVG] (159)				
Press HSD Key (4) (107)							

FUNCTION 56 Perform Hover [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Control Altitude [NVG] (016) Control Altitude [NVG] (023) Control Heading [NVG] (102) Control Drift [NVG] (060) Maintain Obstacle Clearance [NVG] (159)		Check Obstacle Clearance [NVG] (158)		

FUNCTION 57 Perform IFF Procedures

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press IFF Key (1) (110)			
				Press IFF MODE Key (1) (111)			
				Check IFF Code (109)			
				Press IFF NORM/STBY Key (1) (112)			
				Press BCN OPER Key (1) (027)			
				Press RTN Key (1) (183)			

FUNCTION 58 Perform Navigation [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
							Interpret Map Features (130) Verify Flight Path [NVG] (072) Check Heading (098) Check Course Display (051) Verify Flight Path (FLIR) (071)

FUNCTION 59 Perform Navigation (RADAR)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press RADAR Key (1) (171) Verify Flight Path (RADAR) (073) Press FLIR Key (1) (077)			

FUNCTION 60 Perform Rendezvous Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press NAV AIDS Key (1) (149) Press TCN BRG Key (1) (202) Press TCN A/VAR Key (1) (201) Check TACAN Channel (197) Press RTN Key (1) (183)			

FUNCTION 61 Perform Rendezvous [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Locate Tanker (200)				Press SYST Key (1) (195)			
				Press CHECK LISTS Key (1) (039)			
				Press SEQ Key (1) (186)			
				Press GET LIST Key (1) (092)			
				Set Lights (123)			
				Set Refuel Panel (177)			
				Press VSD Key (1) (225)			
				Locate Tanker (200)			

FUNCTION 62 Perform Taxi [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Control Forward Motion (Taxi) [NVG] (081) Control Heading (Taxi) [NVG] (103) Maintain Obstacle Clearance [NVG] (159)		Check Obstacle Clearance [NVG] (158)		

FUNCTION 63 Perform Taxiing Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Check Brakes (Pilot) (032) Check Steering (192)				Check Brakes (Copilot) (031) Set TAILWHEEL Switch (199) Check Tailwheel Advisory Light (198)			

FUNCTION 64 Program Transponder

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press IFF Key (2) (110)			
				Press MODE 1 Key (2) (143)			
				Press MODE 3A Key (2) (145)			
				Press MODE C Key (2) (146)			
				Press MODE 2 Key (2) (144)			
				Press IFF NORM/STBY Key (2) (112)			
				Press RTN Key (2) (183)			

FUNCTION 65 Respond to Threat [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Detect Threat (204)			Perform Hard Turns [NVG] (096) Change Altitude Sharply [NVG] (017) Change Airspeed Quickly [NVG] (012)	Detect Threat (204) Press ASE Key (019) Check MASTER Key (132) Press STR Key (1) (193) Press FLY OVER STR Key (1) (079) Enter Threat Information (205) Press RTN Key (1) (183)			

FUNCTION 66 Set up Communication Radios

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press COMM Key (2) (040)			
				Press VHF 2 Key (2) (222)			
				Press SQL Key (2) (190)			
				Press VHF 1 Key (2) (221)			
				Press SQL Key (2) (190)			
				Press VHF LIST Key (2) (223)			
				Press CHAN Key (2) (038)			
				Press TUNE VHF 1 Key (2) (211)			
				Press CHAN Key (2) (038)			
				Press TUNE VHF 2 Key (2) (212)			
				Press HF COMM Key (2) (104)			
				Press HF LIST Key (2) (105)			
				Press CHAN Key (2) (038)			
				Press TUNE HF Key (2) (209)			
				Continued...			

FUNCTION 66 Set up Communication Radios [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press UHF COMM Key (2) (214)			
				Press UHF LIST Key (2) (215)			
				Press CHAN Key (2) (038)			
				Press TUNE UHF 1 Key (2) (210)			
				Press SEC Key (2) (184)			
				Press RTN Key (2) (183)			

FUNCTION 67 Unload Aircraft (Internal)

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Monitor Unloading (216) Verify Unloading Complete (217) Transmit Communication (Crewchief) (046) Receive Communication (Crewchief) (045)			

FUNCTION 68 Update Navigation (FLIR)

PILOT				COPILOT			
DISCRETE STAFF	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press FLIR Key (2) (077)			
				Press PT (2) Key (169)			
				Press UPD Key (2) (218)			
				Press SLEW Key (2) (188)			
				Set FOV Scale Switch (2) (084)			
				Identify Landmark (FLIR) (117)			
				Slew Update Cursor (219)			
				Pull Mode Trigger (147)			
				Release Mode Trigger (148)			
				Press SNSR UPD Key (2) (189)			
				Press ACC Key (2) (001)			
				Press RTN Key (2) (183)			
				Press MAP Key (2) (131)			

FUNCTION 69 Update Navigation (LZ)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press UPD Key (2) (218) Enter NRP Number (157) Press FLY OVER UPD Key (2) (080) Press ACC Key (001) Press RTN Key (2) (183)			

FUNCTION 70 Update Navigation (Mission Change)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press STR Key (2) (193)			
				Press LOOK AHD Key (2) (127)			
				Press RNG Key (2) (180)			
				Scan Map Display (2) (128)			
				Identify Landmark (Map) (118)			
				Press SLEW Key (2) (188)			
				Slew Update Cursor (219)			
				Pull Mode Trigger (147)			
				Release Mode Trigger (148)			
				Enter New NRP Number (152)			
				Enter NRP Data (156)			
				Press STR NRP Key (194)			
				Scan Map Display (2) (128)			
				Identify Landmark (Map) (118)			
				Slew Update Cursor (219)			
				Continued...			

FUNCTION 70 Update Navigation (Mission Change) [Continued]

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Pull Mode Trigger (147)			
				Release Mode Trigger (148)			
				Enter New NRP Number (152)			
				Enter NRP Data (156)			
				Press STR NRP Key (2) (194)			
				Scan Map Display (2) (128)			
				Identify Landmark (Map) (118)			
				Slew Update Cursor (219)			
				Pull Mode Trigger (147)			
				Release Mode Trigger (148)			
				Enter New NRP Number (152)			
				Enter NRP Data (156)			
				Press STR NRP Key (2) (194)			
				Press SYST Key (2) (195)			
				Press FPLN Key (2) (085)			
				Continued...			

FUNCTION 70 Update Navigation (Mission Change) [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press LEG ADD Key (2) (119) Press LEGS Key (2) (122) Press DISPLAY LEG Key (2) (059) Enter Leg Data (120) Press LEG MOD Key (2) (121) Press FUEL/POWER Key (2) (091) Check Fuel Summary (090) Press HSD Key (2) (107)			

FUNCTION 71 Update Navigation (NRP)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Press TA Key (1) (196)			
				Press UPD Key (1) (218)			
				Press SLEW Key (1) (188)			
				Verify NRP (155)			
				Press SNSR UPD Key (1) (189)			
				Press ACC Key (1) (001)			
				Press RTN Key (1) (183)			
				Press GM/TF Key (1) (093)			

A P P E N D I X I

MH-60K FUNCTION DECISION RULES WORKSHEETS

Once the Function Summary Worksheets (see Appendix H) were completed for each function, decision rules were written to describe the exact manner in which the tasks are combined to form the function. Decision rules for discrete fixed tasks and continuous fixed tasks simply state the start time and duration of the task on the function timeline. In addition to duration, the decision rules for discrete random and continuous random tasks state the probability and/or frequency of the random task's occurrence within the function. This appendix contains the 71 function decision rules.

FUNCTION 01 Adjust Approach Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select Tasks 011, 023, 060, 102, or 175 at 1-second intervals for the duration of the function Standby .5 second				

FUNCTION 02 Adjust Climb Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select Tasks 011, 023, 102, or 174 at 1-second intervals for the duration of the function. Standby 5 second				

FUNCTION 03 Adjust Flight Parameters (NVG)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select Tasks 011, 015, 023, 101, 159, 166, or 208 at 1-second intervals for the duration required for the segment. Standby .5 second				

FUNCTION 04 Adjust Level of Flight Parameters [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select Tasks 011, 016, 023, or 102 at 1-second intervals for the duration of the function. Standby 5 second				

FUNCTION 05 Adjust Map Display (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
							Randomly select one of the following tasks: Task 037 for .5 second Task 056 for .5 second Task 129 for .5 second Task 179 for .5 second Task 181 for .5 second Standby .5 second

FUNCTION 06 Adjust Map Display (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select one of the following tasks: Task 037 for .5 second Task 056 for .5 second Task 129 for .5 second Task 179 for .5 second Task 181 for .5 second Standby .5 second				

FUNCTION 07 Align Navigation Systems

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 195 for .5 second Task 151 for .5 second Task 150 for .5 second Task 036 for .5 second Task 154 for .5 second Task 114 for .5 second Task 115 for .5 second Task 095 for .5 second Task 007 for .5 second Task 006 for .5 second Task 114 for .5 second Task 151 for .5 second Task 094 for .5 second Task 107 for .5 second Standby .5 second			

FUNCTION 08 Borelight FLIR

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 075 for .5 second Task 078 for .5 second Task 153 for .5 second Task 030 for .5 second Task 033 for .5 second Task 083 for .5 second Task 153 for .5 second Task 005 for .5 second Task 183 for .5 second Standby .5 second			

FUNCTION 09 Check Approach Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select one of the following tasks: Task 010 for .5 second Task 100 for .5 second Task 173 for .5 second Standby .5 second				

FUNCTION 10 Check Avionics System

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 226 for .5 second Task 066 for .5 second Task 160 for .5 second Task 191 for 400 seconds Task 065 for 3 seconds Task 183 for .5 second Standby .5 second			

FUNCTION 11 Check Climb Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select one of the following tasks: Task 010 for .5 second Task 100 for .5 second Task 173 for .5 second Standby .5 second				

FUNCTION 12 Check Flight Instruments (Auto)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select one of the following tasks: Task 013 for .5 second Task 008 for .5 second Task 098 for .5 second Task 021 for .5 second Standby .5 second				

FUNCTION 13 Check Flight Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select one of the following tasks: Task 014 for .5 second Task 010 for .5 second Task 230 for .5 second Task 100 for .5 second Task 207 for .5 second Standby .5 second				

FUNCTION 14 Check Level of Flight Parameters

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select one of the following tasks: Task 230 for .5 second Task 014 for .5 second Task 010 for .5 second Task 100 for .5 second Standby .5 second				

FUNCTION 15 Check Map Display System (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 129 for .5 second Task 181 for .5 second Task 179 for .5 second Task 056 for .5 second Task 037 for .5 second Standby .5 second			

FUNCTION 16 Check Map Display System (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 129 for .5 second Task 181 for .5 second Task 179 for .5 second Task 056 for .5 second Task 037 for .5 second Standby .5 second							

FUNCTION 17 Configure Flight Director

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 195 for .5 second Task 085 for .5 second Task 086 for .5 second Task 087 for .5 second Task 225 for .5 second Standby .5 second							

FUNCTION 18 Configure Navigation Radios

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 068 for .5 second Task 153 for .5 second Task 004 for .5 second Task 224 for .5 second Task 107 for .5 second Task 149 for .5 second Task 202 for .5 second Task 183 for .5 second Standby .5 second			

FUNCTION 19 Depart Rendezvous [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 177 for 10 seconds Task 140 for 3 seconds Task 002 for 2 seconds Task 225 for .5 second Task 110 for .5 second Task 028 for .5 second Task 113 for .5 second Task 195 for .5 second Task 091 for .5 second Task 090 for 3 seconds Task 225 for .5 second Standby .5 second			

FUNCTION 20 Engage Level Flight (Auto)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 068 for .5 second Task 009 for 4 seconds Task 026 for 4 seconds Task 099 for 4 seconds Task 018 for .5 second Task 025 for .5 second Task 097 for .5 second Task 183 for .5 second Standby .5 second			

FUNCTION 21 Establish Approach (NVG)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program in sequence, the following tasks (include a .5-second delay between tasks): Task 230 for .5 second Task 166 for 2 seconds Task 230 for .5 second Task 068 for .5 second Task 108 for .5 second Task 183 for .5 second Standby .5 second			Start Task 069 when Task 230 ends. Task 069 lasts until the end of the function.				

FUNCTION 22 Establish Climb [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program in sequence, the following tasks (include a .5-second delay between tasks): Task 230 for .5 second Task 166 for 2 seconds Task 230 for .5 second Standby .5 second							

FUNCTION 23 Establish Hover [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program in sequence, the following tasks (include a .5-second delay between tasks): Task 166 for 2 seconds Task 230 for .5 second Standby .5 second							

FUNCTION 24 Establish Level of Flight [NVG]

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program in sequence, the following tasks (include a .5-second delay between tasks): Task 022 for 1 second Task 230 for .5 second Task 166 for 2 seconds Standby .5 second							

FUNCTION 25 Land Aircraft [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
<p>After 38.5 seconds, program Task 206 for 5 seconds.</p> <p>Standby .5 second</p>			Randomly alternate (.20 probability) Tasks 023, 060, 102, 159, and 166 at 1 second intervals. Continue for 38 seconds.		7 times during the first 38 seconds, randomly select Task 158. Task 158 lasts 3 seconds.		

FUNCTION 26 Load Aircraft (Internal)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 126 for 60 seconds Task 125 for 30 seconds Task 046 for 3 seconds Task 045 for 3 seconds Standby .5 second			

FUNCTION 27 Load Mission Plan

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 061 for 4 seconds Task 029 for 30 seconds Task 195 for .5 second Task 142 for .5 second Task 142 for .5 second Task 122 for .5 second Task 141 for 10 seconds Task 107 for .5 second Standby .5 second			

FUNCTION 28 Mission Change

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program in sequence, the following tasks (include a .5-second delay between tasks): Task 138 for 1 second Task 195 for .5 second Task 020 for .5 second Task 058 for .5 second Task 135 for 12 seconds Task 183 for .5 second Standby .5 second			

FUNCTION 29 Monitor Audio

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Program Task 024 for the duration of the segment in which Function 29 occurs.				Program Task 024 for the duration of the segment in which Function 29 occurs.	

FUNCTION 30 Monitor External Visual Field (Copilot, [NVG])

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
						Program Task 067 for the length of Function 30.	

FUNCTION 31 Monitor External Visual Field (Pilot) [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Program Task 067 for the length of Function 31.					

FUNCTION 32 Monitor Flight Controls

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Program Task 069 for the length of Function 32.					

FUNCTION 33 Monitor FLIR Image (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
						Program Task 076 for the length of Function 33.	

FUNCTION 34 Monitor FLIR Image (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Program Task 076 for the length of Function 34.					

FUNCTION 35 Monitor RADAR Image (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
						Program Task 170 for the length of Function 35.	

FUNCTION 36 Monitor RADAR Image (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
		Program Task 170 for the length of Function 36.					

FUNCTION 37 Monitor Threat (Copilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program Task 057 for 3 seconds. Standby .5 second			

FUNCTION 38 Monitor Threat (Pilot)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program Task 057 for 3 seconds. Standby 5 second		Program Task 069 for the length of Function 38.					

FUNCTION 39 Perform Aerial Refueling [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program Task 167 and Task 168 to occur with copilot Task 167 and Task 168. Task 167 lasts 4 seconds. Task 168 lasts 2 seconds.				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 140 for 3 seconds Task 136 for 5 seconds Task 003 for 2 seconds Task 167 for 4 seconds Task 140 for 3 seconds Task 002 for 2 seconds Task 116 for .5 second Start Task 140 229 seconds after Function 39 begins. Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 140 for 3 seconds Task 002 for 2 seconds Task 178 for 4 seconds Task 168 for 2 seconds Standby .5 second	30 times during the function, randomly select (.50 probability) Task 089. Task 089 lasts 3 seconds.		

FUNCTION 40 Perform After Landing Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 195 for .5 second Task 039 for .5 second Task 186 for .5 second Task 082 for .5 second Task 172 for 4 seconds Task 199 for 1 second Task 198 for 1 second Standby .5 second			

FUNCTION 41 Perform Before Hover Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 182 for .5 second Task 068 for .5 second Task 108 for .5 second Task 183 for .5 second Task 106 for 180 seconds Standby .5 second							

FUNCTION 42 Perform Before Landing Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 195 for .5 second Task 039 for .5 second Task 186 for .5 second Task 092 for .5 second Task 182 for .5 second Task 227 for 1 second Task 172 for 1 second Task 161 for 1 second Task 068 for .5 second Task 018 for .5 second Task 025 for .5 second Task 097 for .5 second Task 183 for .5 second Task 198 for 1 second Task 019 for .5 second Task 133 for .5 second Task 052 for 3 seconds Task 045 for 3 seconds Task 225 for .5 second Standby .5 second			

FUNCTION 43 Perform Before Landing Check (LZ)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks):			
				Task 195 for .5 second			
				Task 039 for .5 second			
				Task 186 for .5 second			
				Task 092 for .5 second			
				Task 182 for .5 second			
				Task 227 for 1 second			
				Task 172 for 1 second			
				Task 161 for 1 second			
				Task 068 for .5 second			
				Task 018 for .5 second			
				Task 025 for .5 second			
				Task 097 for .5 second			
				Task 183 for .5 second			
				Task 198 for 1 second			
				Task 019 for .5 second			
				Task 133 for .5 second			
				Task 124 for 3 seconds			
				Task 045 for 3 seconds			
				Task 225 for .5 second			
				Standby .5 second			

FUNCTION 44 Perform Before Takeoff Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks):				Program, in sequence, the following tasks (include a .5-second delay between tasks):			
Task 116 for .5 second				Task 195 for .5 second			
Task 090 for 3 seconds				Task 039 for .5 second			
Task 062 for 5 seconds				Task 186 for .5 second			
Task 225 for .5 second				Task 092 for .5 second			
Task 220 for 5 seconds				Task 195 for .5 second			
Task 055 for .5 second				Task 085 for .5 second			
Task 077 for .5 second				Task 087 for .5 second			
Task 088 for .5 second				Task 107 for .5 second			
Task 082 for .5 second				Task 068 for .5 second			
Task 164 for .5 second				Task 228 for .5 second			
Task 107 for .5 second				Task 053 for .5 second			
Task 176 for .5 second				Task 183 for .5 second			
Task 196 for .5 second				Task 226 for .5 second			
Task 055 for .5 second				Task 035 for 1 second			
				Task 183 for .5 second			
				Task 161 for 1 second			
				Task 172 for 4 seconds			
				Task 019 for .5 second			
				Task 133 for .5 second			
				Continued...			

FUNCTION 44 Perform Before Takeoff Check (Continued)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Task 131 for .5 second Task 054 for .5 second Task 055 for .5 second Task 225 for .5 second Task 176 for .5 second Task 203 for .5 second Task 093 for .5 second Task 055 for .5 second Task 034 for .5 second Task 045 for 3 seconds Standby .5 second			

FUNCTION 45 Perform Before Takeoff Check (LZ)

PILOT				COPILOT				
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	
				Program, in sequence, the following tasks (include a .5-second pause between tasks): Task 191 for .5 second Task 031 for .5 second Task 186 for .5 second Task 092 for .5 second Task 116 for .5 second Task 090 for 3 seconds Task 062 for 5 seconds Task 226 for .5 second Task 035 for 1 second Task 183 for .5 second Task 161 for 1 second Task 172 for 4 seconds Task 019 for .5 second Task 133 for .5 second Task 045 for 3 seconds Task 107 for .5 second Task 225 for .5 second Standby .5 second				

FUNCTION 47 Perform Cockpit Communication (Copilot) (Coordination)

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 047 for 3 seconds Task 049 for 3 seconds Standby .5 second				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 043 for 3 seconds Task 041 for 3 seconds Standby .5 second			

FUNCTION 48 Perform Cockpit Communication (Copilot) (Normal)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 048 for 2 seconds Task 050 for 2 seconds Standby .5 second				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 044 for 2 seconds Task 042 for 2 seconds Standby .5 second			

FUNCTION 49 Perform Cockpit Communication (Pilot) (Coordination)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 049 for 3 seconds Task 047 for 3 seconds Standby .5 second				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 041 for 3 seconds Task 043 for 3 seconds Standby .5 second			

FUNCTION 50 Perform Cockpit Communication (Pilot) (Normal)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 050 for 2 seconds Task 048 for 2 seconds Standby .5 second				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 042 for 2 seconds Task 044 for 2 seconds Standby .5 second			

FUNCTION 51 Perform External Communication [ATHS]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 195 for .5 second Task 020 for 5 second Task 187 for .5 second Task 134 for 15 seconds Task 064 for .5 second Task 229 for .5 second Standby .5 second			

FUNCTION 52 Perform External Communication (Frequency Change)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 040 for .5 second Task 214 for .5 second Task 215 for .5 second Task 185 for 2 seconds Task 210 for .5 second Task 183 for .5 second Task 140 for 4 seconds Task 002 for 2 seconds Task 140 for 4 seconds Task 002 for 2 seconds Standby 5 second			

FUNCTION 53 Perform External Communication (Receive Coordination)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 139 for 2 seconds Task 003 for 2 seconds Task 136 for 5 seconds Task 003 for 2 seconds Standby .5 second			

FUNCTION 54 Perform External Communication (Transmit Code)

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 137 for 5 seconds Task 002 for 2 seconds Task 137 for 5 seconds Task 002 for 2 seconds Standby .5 second			

FUNCTION 55 Perform Hover Check [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program, in sequence, the following tasks (include a .5 second delay between tasks): Task 116 for .5 second Task 070 for 10 seconds Task 063 for 5 seconds Task 074 for 10 seconds Task 165 for 5 seconds Task 107 for .5 second Standby .5 second			Randomly select (20 probability) Tasks 016, 023, 060, 102, or 159 at 1-second intervals. Continue until the end of the function. Standby .5 second		4 times during Function 56, randomly select Task 158. Task 158 lasts 3 seconds.		

FUNCTION 56 Perform Hover [NVG]

PILOT				COPLOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select (.20 probability) Tasks 016, 023, 060, 102, or 159 at 1-second intervals. Continue for 220 seconds. Standby .5 second		25 times during Function 56, randomly select Task 158. Task 158 lasts 3 seconds.		

FUNCTION 57 Perform IFF Procedures

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 110 for .5 second Task 111 for .5 second Task 109 for 5 seconds Task 112 for .5 second Task 027 for .5 second Task 183 for .5 second Standby .5 second			

FUNCTION 58 Perform Navigation [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
							Randomly select (.25 probability) Tasks 051, 071, 072, 098, or 130 for the duration of the segment in which Function 58 occurs. Select: Task 051 for 5 seconds Task 071 for 10 seconds Task 072 for 10 seconds Task 098 for .5 second Task 130 for 8 seconds Interrupt any ongoing task when the function ends. Standby .5 second

FUNCTION 59 Perform Navigation (RADAR)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 171 for .5 second Task 073 for 15 seconds Task 077 for .5 second Standby .5 second			

FUNCTION 60 Perform Rendezvous Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 149 for .5 second Task 202 for .5 second Task 201 for .5 second Task 197 for 3 seconds Task 183 for .5 second Standby .5 second			

FUNCTION 61 Perform Rendezvous [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
.5 second after Task 225 ends, program Task 200 for 40 seconds.				Program, in sequence, the following tasks (include a .5-second delay between tasks):			
				Task 195 for .5 second			
				Task 039 for .5 second			
				Task 186 for .5 second			
				Task 092 for .5 second			
				Task 123 for 6 seconds			
				Task 177 for 10 seconds			
				Task 225 for .5 second			
				Task 200 for 40 seconds			
				Standby .5 second			

FUNCTION 62 Perform Taxi [NVG]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
			Randomly select (.33 probability) Tasks 081, 103, or 159 at .5-second intervals. Continue for 180 seconds. Standby .5 second		30 times during Function 62, randomly select Task 158. Task 158 lasts 3 seconds.		

FUNCTION 63 Perform Taxiing Check

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program Task 032 for 5 seconds				Program, in sequence, the following tasks when Task 032 ends (include a .5-second delay between tasks): Task 031 for 5 seconds Task 199 for 1 second Task 198 for 1 second Standby .5 second			
Program Task 192 for 10 seconds when Task 031 ends.							

FUNCTION 64 Program Transponder

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 110 for .5 second Task 143 for .5 second Task 145 for .5 second Task 146 for .5 second Task 144 for .5 second Task 112 for .5 second Task 183 for .5 second Standby .5 second			

FUNCTION 65 Respond to Threat (NVG)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
Program Task 204 for 3 seconds.			.5 second after Task 204 ends, randomly select (.33 probability) Tasks 012, 017, or 096 at 4-second intervals. Continue for 56.5 seconds. Standby .5 second	Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 204 for 3 seconds Task 019 for .5 second Task 132 for 1 second Task 193 for .5 second Task 079 for .5 second Task 205 for 30 seconds Task 183 for .5 second			

FUNCTION 66 Set up Communication Radios

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks):			
				Task 040 for .5 second			
				Task 222 for .5 second			
				Task 190 for .5 second			
				Task 221 for .5 second			
				Task 190 for .5 second			
				Task 223 for .5 second			
				Task 038 for .5 second			
				Task 211 for .5 second			
				Task 038 for .5 second			
				Task 212 for .5 second			
				Task 104 for .5 second			
				Task 105 for .5 second			
				Task 038 for .5 second			
				Task 209 for .5 second			
				Task 214 for .5 second			
				Task 215 for .5 second			
				Task 038 for .5 second			
				Task 210 for .5 second			
				Continued...			

FUNCTION 66 Set up Communication Radios [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Task 184 for .5 second Task 183 for .5 second Standby 5 second			

FUNCTION 67 Unload Aircraft (Internal)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 216 for 10 seconds Task 217 for 3 seconds Task 046 for 3 seconds Task 045 for 3 seconds Standby .5 second			

FUNCTION 68 Update Navigation (FLIR)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 077 for .5 second Task 169 for .5 second Task 218 for .5 second Task 188 for .5 second Task 084 for 1 second Task 117 for 5 seconds Task 219 for 4 seconds Task 147 for .5 second Task 148 for .5 second Task 189 for .5 second Task 001 for .5 second Task 183 for .5 second Task 131 for .5 second Standby .5 second			

FUNCTION 69 Update Navigation (LZ)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 218 for .5 second Task 157 for 5 seconds Task 080 for .5 second Task 001 for .5 second Task 183 for .5 second Standby .5 second			

FUNCTION 70 Update Navigation (Mission Change)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 193 for .5 second Task 127 for .5 second Task 180 for .5 second Task 128 for 10 seconds Task 118 for 5 seconds Task 188 for .5 second Task 219 for 4 seconds Task 147 for .5 second Task 148 for .5 second Task 152 for 4 seconds Task 156 for 7 seconds Task 194 for .5 second Task 128 for 10 seconds Task 118 for 5 seconds Task 219 for 4 seconds Task 147 for .5 second Task 148 for .5 second Task 152 for 4 seconds Task 156 for 7 seconds Continued...			

FUNCTION 70 Update Navigation (Mission Change) [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Task 194 for .5 second			
				Task 128 for 10 seconds			
				Task 118 for 5 seconds			
				Task 219 for 4 seconds			
				Task 147 for .5 second			
				Task 148 for .5 second			
				Task 152 for 4 seconds			
				Task 156 for 7 seconds			
				Task 194 for .5 second			
				Task 195 for .5 second			
				Task 085 for .5 second			
				Task 119 for .5 second			
				Task 122 for .5 second			
				Task 059 for .5 second			
				Task 120 for 7 seconds			
				Task 121 for .5 second			
				Task 091 for .5 second			
				Task 090 for 6 seconds			
				Task 107 for .5 second			
				Standby .5 second			

FUNCTION 71 Update Navigation (NRP)

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS RANDOM
				Program, in sequence, the following tasks (include a .5-second delay between tasks): Task 196 for .5 second Task 218 for .5 second Task 188 for .5 second Task 155 for 5 seconds Task 189 for .5 second Task 001 for .5 second Task 183 for .5 second Task 093 for .5 second Standby .5 second			

A P P E N D I X J

MH-60K SEGMENT SUMMARY WORKSHEETS

This appendix contains the Segment Summary Worksheets for each of the 15 segments. The summary worksheets identify and list all of the functions performed by the pilot and copilot during each mission segment. The summary worksheets also identify the type of functions (i.e., discrete fixed, discrete random, or continuous fixed) performed by the crewmember and the approximate temporal arrangement of the functions within the segments.

SEGMENT 01 Configure Systems for Mission

PHASE 1 Departure (Base)

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Configure Flight Director (17)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor Flight Controls (32)	Load Mission Plan (27)	Perform Cockpit Communication (Pilot) (Coordination) (49)	
Check Map Display System (Pilot) (16)	Perform Cockpit Communication (Copilot) (Coordination) (47)	Monitor External Visual Field ([NVG] (Pilot) (31)	Check Avionics System (10)	Perform Cockpit Communication (Copilot) (Coordination) (47)	
	Perform Cockpit Communication (Pilot) (Normal) (50)		Align Navigation Systems (07)	Perform Cockpit Communication (Pilot) (Normal) (50)	
	Perform Cockpit Communication (Copilot) (Normal) (48)		Check Map Display System (Copilot) (15)	Perform Cockpit Communication (Copilot) (Normal) (48)	
			Configure Navigation Radios (18)		
			Set Up Communication Radio (66)		
			Program Transponder (64)		
			Boresight FLIR (08)		

PHASE 1 Departure (Base)SEGMENT 02 Before Takeoff (Base/Internal Load)

PILOT				COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	
Perform Before Taxi Check (46)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor Flight Controls (32)	Program Transponder (64)	Perform Cockpit Communication (Pilot) (Coordination) (49)		
Perform Taxi [NVG] (62)	Perform Cockpit Communication (Copilot) (Coordination) (47)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Before Taxi Check (46)	Perform Cockpit Communication (Copilot) (Coordination) (47)		
Perform Taxiing Check (63)			Perform Taxi [NVG] (62)	Perform Cockpit Communication (Pilot) (Normal) (50)		
Perform Before Hover Check (41)	Perform Cockpit Communication (Pilot) (Normal) (50)		Perform Taxiing Check (63)	Perform Cockpit Communication (Copilot) (Normal) (48)		
Perform Hover Check [NVG] (55)	Perform Cockpit Communication (Copilot) (Normal) (48)		Perform Hover Check [NVG] (55)			
Land Aircraft [NVG] (25)			Land Aircraft [NVG] (25)			
Perform Before Takeoff Check (44)			Load Aircraft (Internal) (26)			
			Perform Before Takeoff Check (44)			
			Perform External Communication (Receive Coordination) (53)			

PHASE 1 Departure (Base)*SEGMENT 03 Takeoff [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Establish Hover [NVG] (23)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Hover [NVG] (56)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Copilot) (30)
Perform Hover [NVG] (56)	Check Climb Parameters (11)			Perform Cockpit Communication (Copilot) (Coordination) (47)	
Establish Climb [NVG] (22)	Perform Cockpit Communication (Copilot) (Coordination) (47)			Monitor Threat (Copilot) (37)	
Adjust Climb Parameters [NVG] (02)	Check Level of Flight Parameters (14)			Perform Cockpit Communication (Pilot) (Normal) (50)	
Establish Level of Flight [NVG] (24)	Monitor Threat (Pilot) (38)			Perform Cockpit Communication (Copilot) (Normal) (48)	
Adjust Level of Flight Parameters [NVG] (04)	Perform Cockpit Communication (Pilot) (Normal) (50)				
	Perform Cockpit Communication (Copilot) (Normal) (48)				

*Denotes segment that occurs in more than one mission phase.

PHASE 2 Enroute (Base - Rendezvous)SEGMENT 04 Enroute Flight

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	Check Flight Instruments (Auto) (12)	Monitor Flight Controls (32)	Engage Level Flight (Auto) (20)	Adjust Map Display (Copilot) (05)	Perform Navigation [NVG] (58)
	Monitor Threat (Pilot) (38)	Monitor External Visual Field [NVG] (Pilot) (31)		Monitor Threat (Copilot) (37)	
	Perform Cockpit Communication (Pilot) (Coordination) (49)			Perform Cockpit Communication (Pilot) (Coordination) (49)	
	Perform Cockpit Communication (Copilot) (Coordination) (47)			Perform Cockpit Communication (Copilot) (Coordination) (47)	
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform External Communication (Transmit Code) (54)	
	Perform Cockpit Communication (Copilot) (Normal) (48)			Perform Cockpit Communication (Pilot) (Normal) (50)	
	Adjust Map Display (Pilot) (06)			Perform Cockpit Communication (Copilot) (Normal) (48)	
	Monitor FLIR Image (Pilot) (34)			Monitor FLIR Image (Copilot) (33)	
				Continued	

PHASE 2 Enroute (Base - Rendezvous)SEGMENT 04 Enroute Flight [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
						Perform Navigation (RADAR) (59)	

PHASE 2 Enroute (Base - Rendezvous)SEGMENT 05 Contour Flight (No Update) [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	Monitor Threat (Pilot) (38) Perform Cockpit Communication (Pilot) (Coordination) (49) Perform Cockpit Communication (Copilot) (Coordination) (47) Check Flight Parameters (13) Perform Cockpit Communication (Pilot) (Normal) (50) Perform Cockpit Communication (Copilot) (Normal) (48) Adjust Map Display (Pilot) (06) Monitor FLIR Image (Pilot) (34)	Adjust Flight Parameters [NVG] (03) Monitor External Visual Field [NVG] (Pilot) (31)		Adjust Map Display (Copilot) (05) Monitor Threat (Copilot) (37) Perform Cockpit Communication (Pilot) (Coordination) (49) Perform Cockpit Communication (Copilot) (Coordination) (47) Perform External Communication (Transmit Code) (54) Perform Cockpit Communication (Pilot) (Normal) (50) Perform Cockpit Communication (Copilot) (Normal) (48) Monitor FLIR Image (Copilot) (33) Continued...	Perform Navigation [NVG] (58)

PHASE 2 Enroute (Base - Rendezvous) _____

SEGMENT 05 Contour Flight (No Update) [ANVIS] [Continued]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
						Perform Navigation (RADAR) (59)	

PHASE 2 Enroute (Base - Rendezvous)

*SEGMENT 06 Contour Flight (Update) [ANVIS]

PILOT		COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	Monitor Threat (Pilot) (38)	Adjust Flight Parameters [NVG] (03)	Update Navigation (FLIR) (68)	Adjust Map Display (Copilot) (05)	Perform Navigation [NVG] (58)
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Update Navigation (NRP) (71)	Monitor Threat (Copilot) (37)	
	Perform Cockpit Communication (Copilot) (Coordination) (47)			Perform Cockpit Communication (Pilot) (Coordination) (49)	
	Check Flight Parameters (13)			Perform Cockpit Communication (Copilot) (Coordination) (47)	
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform External Communication (Transmit Code) (54)	
	Perform Cockpit Communication (Copilot) (Normal) (48)			Perform Cockpit Communication (Pilot) (Normal) (50)	
	Monitor RADAR Image (Pilot) (36)			Perform Cockpit Communication (Copilot) (Normal) (48)	
	Monitor FLIR Image (Pilot) (34)				

*Denotes segment that occurs in more than one mission phase.

PHASE 2 Enroute (Base - Rendezvous)

*SEGMENT 07 Rendezvous [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	Monitor Threat (Pilot) (38)	Adjust Level of Flight Parameters [NVG] (04)	Perform External Communication (Frequency Change) (52)	Monitor Threat (Copilot) (37)	
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Rendezvous Check (60)	Perform Cockpit Communication (Pilot) (Coordination) (49)	
	Perform Cockpit Communication (Copilot) (Coordination) (47)		Perform IFF Procedures (57)	Perform Cockpit Communication (Copilot) (Coordination) (47)	
Perform Rendezvous [NVG] (61)	Check Flight Parameters (13)		Perform Rendezvous [NVG] (61)	Perform Cockpit Communication (Pilot) (Normal) (50)	
Perform Aerial Refueling [NVG] (39)	Perform Cockpit Communication (Pilot) (Normal) (50)		Perform Aerial Refueling [NVG] (39)	Perform Cockpit Communication (Copilot) (Normal) (48)	
	Perform Cockpit Communication (Copilot) (Normal) (48)		Depart Rendezvous [NVG] (19)		
	Monitor FLIR Image (Pilot) (34)			Monitor FLIR Image (Copilot) (33)	

*Denotes segment that occurs in more than one mission phase.

PHASE 3 Enroute (Rendezvous - LZ)SEGMENT 08 NOE Flight [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE RANDOM	DISCRETE FIXED	CONTINUOUS FIXED
	Monitor Threat (Pilot) (38)	Adjust Flight Parameters [NVG] (03)	Adjust Map Display (Copilot) (05)		Perform Navigation [NVG] (58)
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Monitor Threat (Copilot) (37)		
	Perform Cockpit Communication (Copilot) (Coordination) (47)		Perform Cockpit Communication (Pilot) (Coordination) (49)		
	Check Flight Parameters (13)		Perform Cockpit Communication (Copilot) (Coordination) (47)		
	Perform Cockpit Communication (Pilot) (Normal) (50)		Perform Cockpit Communication (Pilot) (Normal) (50)		
	Perform Cockpit Communication (Copilot) (Normal) (48)		Perform Cockpit Communication (Copilot) (Normal) (48)		
			Perform Navigation (RADAR) (59)		

PHASE 3 Enroute (Rendezvous - LZ)**SEGMENT 09 NOE Flight [ANVIS/ASE]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Respond to Threat [NVG] (65)	Monitor Threat (Pilot) (38)	Adjust Flight Parameters [NVG] (03)		Adjust Map Display (Copilot) (05)	Perform Navigation [NVG] (58)
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)		Monitor Threat (Copilot) (37)	
	Perform Cockpit Communication (Copilot) (Coordination) (47)		Respond to Threat [NVG] (65)	Perform Cockpit Communication (Pilot) (Coordination) (49)	
	Check Flight Parameters (13)		Perform External Communication (ATHS) (51)	Perform Cockpit Communication (Copilot) (Coordination) (47)	
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform Cockpit Communication (Pilot) (Normal) (50)	
	Perform Cockpit Communication (Copilot) (Normal) (48)		Update Navigation (FLIR) (68)	Perform Cockpit Communication (Copilot) (Normal) (48)	
				Monitor RADAR Image (Copilot) (35)	

PHASE 3 Enroute (Rendezvous - LZ)**SEGMENT 10 Approach (LZ) [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Establish Approach [NVG] (21)	Monitor Threat (Pilot) (38)	Adjust Approach Parameters [NVG] (01)	Perform Before Landing Check (LZ) (43)	Monitor Threat (Copilot) (37)	Monitor External Visual Field [NVG] (Copilot) (30)
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)		Perform Cockpit Communication (Pilot) (Coordination) (49)	
	Perform Cockpit Communication (Copilot) (Coordination) (47)			Perform Cockpit Communication (Copilot) (Coordination) (47)	
	Check Approach Parameters (09)			Perform Cockpit Communication (Pilot) (Normal) (50)	
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform Cockpit Communication (Copilot) (Normal) (48)	
	Perform Cockpit Communication (Copilot) (Normal) (48)				

PHASE 3 Enroute (Rendezvous - LZ)**SEGMENT 11 Landing (LZ/Internal Load) [ANVIS]**

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED		
Establish Hover [NVG] (23)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Hover [NVG] (56)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Copilot) (30)		
Perform Hover [NVG] (56)	Perform Cockpit Communication (Copilot) (Coordination) (47)	Monitor Flight Controls (32)	Land Aircraft [NVG] (25)	Perform Cockpit Communication (Copilot) (Coordination) (47)			
Land Aircraft [NVG] (25)	Perform Cockpit Communication (Pilot) (Normal) (50)		Unload Aircraft (Internal) (67)	Perform Cockpit Communication (Pilot) (Normal) (50)			
	Perform Cockpit Communication (Copilot) (Normal) (48)			Perform Cockpit Communication (Copilot) (Normal) (48)			

PHASE 4 Enroute (LZ - Rendezvous)SEGMENT 12 Before Takeoff (LZ)

PILOT				COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor Flight Controls (32)	Perform Before Takeoff Check (LZ) (45)	Perform Cockpit Communication (Pilot) (Coordination) (49)		
	Perform Cockpit Communication (Copilot) (Coordination) (47)	Monitor External Visual Field [NVG] (Pilot) (31)	Update Navigation (LZ) (69)	Perform Cockpit Communication (Copilot) (Coordination) (47)		
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform Cockpit Communication (Pilot) (Normal) (50)		
	Perform Cockpit Communication (Copilot) (Normal) (48)			Perform Cockpit Communication (Copilot) (Normal) (48)		

PHASE 4 Enroute (LZ - Rendezvous)***SEGMENT 03 Takeoff [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Establish Hover [NVG] (23)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Hover [NVG] (56)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (30)
Perform Hover [NVG] (56)	Check Climb Parameters (11)			Perform Cockpit Communication (Copilot) (Coordination) (47)	
Establish Climb [NVG] (22)	Perform Cockpit Communication (Copilot) (Coordination) (47)			Monitor Threat (Copilot) (37)	
Adjust Climb Parameters [NVG] (02)	Check Level of Flight Parameters (14)			Perform Cockpit Communication (Pilot) (Normal) (50)	
Establish Level of Flight [NVG] (24)	Monitor Threat (Pilot) (38)			Perform Cockpit Communication (Copilot) (Normal) (48)	
Adjust Level of Flight Parameters [NVG] (04)	Perform Cockpit Communication (Pilot) (Normal) (50)				
	Perform Cockpit Communication (Copilot) (Normal) (48)				

* Denotes segment that occurs in more than one mission phase.

PHASE 4 Enroute (LZ - Rendezvous)

SEGMENT 13 NOE Flight (Route Change) [ANVIS]

PILOT				COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	
	Monitor Threat (Pilot) (38)	Adjust Flight Parameters [NVG] (03)	Mission Change (28)	Adjust Map Display (Copilot) (05)	Perform Navigation [NVG] (58)	
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Update Navigation (Mission Change) (70)	Monitor Threat (Copilot) (37)		
	Perform Cockpit Communication (Copilot) (Coordination) (47)			Perform Cockpit Communication (Pilot) (Coordination) (49)		
	Check Flight Parameters [NVG] (13)			Perform Cockpit Communication (Copilot) (Coordination) (47)		
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform Cockpit Communication (Pilot) (Normal) (50)		
	Perform Cockpit Communication (Copilot) (Normal) (48)			Perform Cockpit Communication (Copilot) (Normal) (48)		

PHASE 4 Enroute (LZ - Rendezvous)

*SEGMENT 07 Rendezvous [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Perform Rendezvous [NVG] (61)	Monitor Threat (Pilot) (38)	Adjust Level of Flight Parameters [NVG] (04)	Perform External Communication (Frequency Change) (52)	Monitor Threat (Copilot) (37)	
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Rendezvous Check (60)	Perform Cockpit Communication (Pilot) (Coordination) (49)	
	Perform Cockpit Communication (Copilot) (Coordination) (47)		Perform IFF Procedures (57)	Perform Cockpit Communication (Copilot) (Coordination) (47)	
	Check Flight Parameters (13)		Perform Rendezvous [NVG] (61)	Perform Cockpit Communication (Pilot) (Normal) (50)	
	Perform Aerial Refueling [NVG] (39)		Perform Aerial Refueling [NVG] (39)	Perform Cockpit Communication (Copilot) (Normal) (48)	
	Perform Cockpit Communication (Copilot) (Normal) (48)		Depart Rendezvous [NVG] (19)	Monitor FLIR Image (Copilot) (33)	
	Monitor FLIR Image (Pilot) (34)				

* Denotes segment that occurs in more than one mission phase.

PHASE 5 Enroute (Rendezvous - Base)

*SEGMENT 06 Contour Flight (Update) [ANVIS]

PILOT				COPILOT			
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED		
	Monitor Threat (Pilot) (38)	Adjust Flight Parameters [NVG] (03)	Update Navigation (FLIR) (68)	Adjust Map Display (Copilot) (05)	Perform Navigation [NVG] (58)		
	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Update Navigation (NRP) (71)	Monitor Threat (Copilot) (37)			
	Perform Cockpit Communication (Copilot) (Coordination) (47)			Perform Cockpit Communication (Pilot) (Coordination) (49)			
	Check Flight Parameters (13)			Perform Cockpit Communication (Copilot) (Coordination) (47)			
	Perform Cockpit Communication (Pilot) (Normal) (50)			Perform External Communication (Transmit Code) (54)			
	Perform Cockpit Communication (Copilot) (Normal) (48)			Perform Cockpit Communication (Pilot) (Normal) (50)			
	Monitor RADAR Image (Pilot) (36)			Perform Cockpit Communication (Copilot) (Normal) (48)			
	Monitor FLIR Image (Pilot) (34)						

*Denotes segment that occurs in more than one mission phase.

PHASE 5 Enroute (Rendezvous - Base)SEGMENT 14 Approach [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Establish Approach [NVG] (21)	Monitor Threat (Pilot) (38) Perform Cockpit Communication (Pilot) (Coordination) (49) Perform Cockpit Communication (Copilot) (Coordination) (47) Check Approach Parameters (09) Perform Cockpit Communication (Pilot) (Normal) (50) Perform Cockpit Communication (Copilot) (Normal) (48)	Adjust Approach Parameters [NVG] (01) Monitor External Visual Field [NVG] (Pilot) (31)	Perform External Communication (Frequency Change) (52) Perform Before Landing Check (42) 		

PHASE 5 Enroute (Rendezvous - Base)**SEGMENT 15 Landing [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Establish Hover [NVG] (23)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Pilot) (31)	Perform Hover [NVG] (56)	Perform Cockpit Communication (Pilot) (Coordination) (49)	Monitor External Visual Field [NVG] (Copilot) (30)
Perform Hover [NVG] (56)	Perform Cockpit Communication (Copilot) (Coordination) (47)	Monitor Flight Controls (32)	Land Aircraft [NVG] (25)	Perform Cockpit Communication (Copilot) (Coordination) (47)	
Land Aircraft [NVG] (25)	Perform Cockpit Communication (Pilot) (Normal) (50)		Perform External Communication (Receive Coordination) (53)	Perform Cockpit Communication (Pilot) (Normal) (50)	
Perform After Landing Check (40)	Perform Cockpit Communication (Copilot) (Normal) (48)		Perform After Landing Check (40)	Perform Cockpit Communication (Copilot) (Normal) (48)	

A P P E N D I X K

MH-60K SEGMENT DECISION RULES WORKSHEETS

Once the Segment Summary Worksheets (see Appendix J) were completed for each segment, decision rules were written to describe the exact manner in which the functions are combined to form the segment. The Segment Decision Rules Worksheets in this appendix contain the decision rules defining the sequence of the functions performed by each crewmember and the times on the mission segment timelines at which the functions begin and end. This appendix contains the 15 segment decision rules.

PHASE 1 Departure (Base)**SEGMENT 01 Configure Systems for Mission**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 17 when Function 07 ends. Function 17 lasts 5 seconds. Start Function 16 when Function 17 ends. Function 16 lasts 5 seconds.	8 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each.	Start Function 32 at the beginning of the segment. Function 32 lasts until the end of the segment.	Start Segment 01 with Function 27. Function 27 lasts 21 seconds. Interrupt Function 27 when Function 47 or 49 occurs.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.	
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.	Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 16 or 17 occurs.	Start Function 10 when Function 27 ends. Function 10 lasts 208 seconds. Start Function 07 36 seconds after Segment 01 begins. Function 07 lasts 14 seconds. Interrupt Function 07 when Function 47 or 49 occurs. Start Function 15 when Function 10 ends. Function 15 lasts 5 seconds.	Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	
			Continued...		

PHASE 1 Departure (Base)SEGMENT 01 Configure Systems for Mission [Continued]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
			Start Function 18 when Function 15 ends. Function 18 lasts 8 seconds.		
			Start Function 66 when Function 18 ends. Function 66 lasts 19 seconds.		
			Start Function 64 when Function 66 ends. Function 64 lasts 7 seconds.		
			Start Function 08 when Function 64 ends. Function 08 lasts 9 seconds.		

PHASE 1 Departure (Base)

SEGMENT 02 Before Takeoff (Base/Internal Load)

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 46 when Function 64 ends. Function 46 lasts 14 seconds. Interrupt Function 46 when Function 47, 48, 49, or 50 occurs.	8 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 41, 53, 55, or 141.	Start Function 32 at the beginning of the segment. Function 32 lasts until the end of the segment. Interrupt Function 32 when Function 25, 55, 62, 63, or 141 occurs.	Start Segment 02 with Function 64. Function 64 lasts 7 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.	
Start Function 62 when Function 46 ends. Function 62 lasts 180 seconds. Interrupt Function 62 when Function 63 occurs.	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 53.	Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 41, 44, 46, or 55 occurs.	Start Function 46 when Function 64 ends. Function 46 lasts 14 seconds.	Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	
Start Function 63 10 seconds after Function 46 ends. Function 63 lasts 20 seconds.			Start Function 62 when Function 46 ends. Function 62 lasts 180 seconds.		
Start Function 41 when Function 62 ends. Function 41 lasts 4 seconds.			Start Function 63 concurrently with Function 62. Function 63 lasts 24.5 seconds.		
Continued...			Start Function 55 when Function 141 ends. Function 55 lasts 34 seconds.		
			Start Function 25 when Function 55 ends. Function 25 lasts 44 seconds.		
			Continued...		

PHASE 1 Departure (Base)**SEGMENT 02 Before Takeoff (Base/Internal Load) [Cont.]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 141 when Function 41 ends. Function 141 lasts 60 seconds.			Start Function 26 when Function 25 ends. Function 26 lasts 98 seconds. Interrupt Function 26 when Function 48 or 50 occurs.		
Start Function 55 when Function 141 ends. Function 55 lasts 34 seconds.			Start Function 144 when Function 26 ends. Function 144 lasts 34 seconds. Interrupt Function 144 when Function 47, 48, 49, or 50 occurs.		
Start Function 44 when Function 26 ends. Function 44 lasts 26 seconds. Interrupt Function 44 when Function 47, 48, 49, or 50 occurs.			Start Function 53 when Function 144 ends. Function 53 lasts 13 seconds.		

PHASE 1 Departure (Base)

*SEGMENT 03 Takeoff [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Segment 03 with Function 23. Function 23 lasts 3.5 seconds.	3 times during the segment, randomly select (.50) Function 47 or Function 49.	Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 11, 14, 22, 23, 24, or 38 occurs.	Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.	Start Function 29 at the beginning of the segment. Function 29 lasts until the end of the segment. Interrupt Function 29 when Function 47 or 49 occurs.
Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.	Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 24.			3 times during the segment, randomly select Function 37.	Start Function 30 at the beginning of the segment. Function 30 lasts until the end of the segment. Interrupt Function 30 when Function 37 occurs.
Start Function 22 when Function 56 ends. Function 22 lasts 4.5 seconds.	3 times during the segment, randomly select Function 38.			Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47 or 49.	
Start Function 02 when Function 56 ends. Function 02 lasts 30 seconds.	Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 11, 14, 24, 47, or 49.				
Start Function 24 when Function 02 ends. Function 24 lasts 5 seconds.	3 times during Function 02, randomly select Function 11. Function 11 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.			Continued...	
Continued...	Continued...				

*Denotes a segment that occurs in more than one mission phase.

PHASE 1 Departure (Base)***SEGMENT 03 Takeoff [ANVIS] [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 04 when Function 02 ends. Function 04 lasts 60 seconds.	3 times during Function 04, randomly select Function 14. Function 14 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49. 20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.			Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	

*Denotes a segment that occurs in more than one mission phase.

PHASE 2 Enroute (Base - Rendezvous)**SEGMENT 04 Enroute Flight**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	10 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each.	Start Segment 04 with Function 32. Function 32 lasts 600 seconds. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 06, 12, 34, or 38 occurs.	Start Segment 04 with Function 20. Function 20 lasts 18.5 seconds. Interrupt Function 20 when Function 47 or 49 occurs.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 6 times during the segment, randomly select Function 05. Function 05 lasts 1 second. 4 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 20, 47, 49, 54, or 58.	Start Function 58 at the beginning of the Segment 04. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 20, 33, 37, 47, 49, 54, or 59 occurs.
	3 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 12, 47, or 49.				
	15 times during the segment, randomly select Function 12. Function 12 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.				
	Continued...			Continued...	

PHASE 2 Enroute (Base - Rendezvous) **SEGMENT 04 Enroute Flight [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	20 times during the segment, randomly select (.50) Function 48 or 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 54. 6 times during the segment, randomly select Function 06. Function 06 lasts 1 second and cannot occur concurrently with Function 12, 34, 38, 47, or 49. 6 times during the segment, randomly select Function 34. Function 34 lasts 10 seconds and cannot occur concurrently with Function 06, 12, 38, 47, or 49.			2 times during the segment, randomly select Function 54. Function 54 lasts 14 seconds and cannot occur concurrently with Function 37, 47, 49, or 58. Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 5u. 5 times during the segment, randomly select Function 59. Function 59 lasts 17.5 seconds and cannot occur concurrently with Function 05, 20, 33, 37, 47, or 49.	
				Continued...	

PHASE 2 Enroute (Base - Rendezvous)SEGMENT 04 Enroute Flight [Continued]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
				6 times during the segment, randomly select Function 33. Function 33 lasts 10 seconds and cannot occur concurrently with Function 05, 20, 37, 47, 49, or 59.	

PHASE 2 Enroute (Base - Rendezvous)SEGMENT 05 Contour Flight (No Update) [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	15 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 38, or 54. 5 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 13, 47, or 49. 10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.	Start Segment 05 with Function 03. Function 03 lasts 600 seconds. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 06, 13, 34, or 38 occurs.		Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 5 times during the segment, randomly select Function 05. Function 05 lasts 1 second. 3 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, 54, or 58.	Start Segment 05 with Function 58. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 33, 37, 47, 49, 54, or 59 occurs.
	Continued			Continued...	

PHASE 2 Enroute (Base - Rendezvous)**SEGMENT 05 Contour Flight (No Update) [ANVIS] [Cont.]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 54.			2 times during the segment, randomly select Function 54. Function 54 lasts 14 seconds and cannot occur concurrently with Function 37, 47, or 49.	
	6 times during the segment, randomly select Function 06. Function 06 lasts 1 second and cannot occur concurrently with Function 13, 34, 38, 47, or 49.			Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	
	6 times during the segment, randomly select Function 34. Function 34 lasts 10 seconds and cannot occur concurrently with Function 06, 13, 38, 47, or 49.			5 times during the segment, randomly select Function 59. Function 59 lasts 17.5 seconds and cannot occur concurrently with Function 05, 33, 37, 47, or 49.	
				Continued...	

PHASE 2 Enroute (Base - Rendezvous)SEGMENT 05 Contour Flight (No Update) [ANVIS] [Cont.]

PILOT				COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	CONTINUOUS FIXED
				6 times during the segment, randomly select Function 33. Function 33 lasts 10 seconds and cannot occur concurrently with Function 05, 37, 47, 49, or 59.		

PHASE 2 Enroute (Base - Rendezvous)***SEGMENT 06 Contour Flight (Update) [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	15 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 38, 57, or 71.	Start Segment 06 with Function 03. Function 03 lasts 600 seconds. Interrupt Function 03 when Function 13 occurs.	Start Function 68 120 seconds after Segment 06 begins. Function 68 lasts 21.5 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.	Start Segment 06 with Function 58. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 37, 47, 49, 54, 68, or 71 occurs.
	5 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 13, 47, or 49.	Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13, 34, 36, or 38 occurs.	Start Function 71 500 seconds after Segment 06 begins. Function 71 lasts 12.5 seconds.	5 times during the segment, randomly select Function 05. Function 05 lasts 1 second.	
	10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.			3 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, 54, 58, 68, or 71.	
	Continued...			Continued...	

*Denotes a segment that occurs in more than one mission phase.

PHASE 2 Enroute (Base - Rendezvous)***SEGMENT 06 Contour Flight (Update) [ANVIS] [Cont.]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 54.			2 times during the segment, randomly select Function 54. Function 54 lasts 14 seconds and cannot occur concurrently with Function 37, 47, 49, 58, 68, or 71. Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	
	6 times during the segment, randomly select Function 34. Function 34 lasts 10 seconds and cannot occur concurrently with Function 13, 36, 38, 47, or 49.				
	6 times during the segment, randomly select Function 36. Function 36 lasts 10 seconds and cannot occur concurrently with Function 13, 34, 38, 47, or 49.				

*Denotes a segment that occurs in more than one mission phase.

PHASE 2 Enroute (Base - Rendezvous)***SEGMENT 07 Rendezvous [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	7 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 38, 52, or 60.	Start Segment 07 with Function 04. Function 04 lasts until the end of the segment. Interrupt Function 04 when Function 13 occurs. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13, 34, or 38 occurs.	Start Segment 07 with Function 52. Function 52 lasts 22.5 seconds. Start Function 60 when Function 52 ends. Function 60 lasts 7.5 seconds. Start Function 57 when Function 60 ends. Function 57 lasts 10.5 seconds. Interrupt Function 57 when Function 33, 37, 47, or 49 occurs.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 2 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, 52, or 60.	
Start Function 61 when Function 57 ends. Function 61 lasts 62.5 seconds. Interrupt Function 61 when Function 38, 47, or 49 occurs.			Start Function 61 when Function 57 ends. Function 61 lasts 62.5 seconds. Interrupt Function 61 when Function 33, 34, 37, 38, 47, or 49 occurs.	Continued...	Continued...
Continued...	Continued...		Continued...		

* Denotes a segment that occurs in more than one mission phase.

PHASE 2 Enroute (Base - Rendezvous)***SEGMENT 07 Rendezvous [ANVIS] [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 39 when Function 61 ends. Function 39 lasts 240 seconds. Interrupt Function 39 when Function 38, 47, or 49 occurs.	10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, 49 or 61. 20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 52. 6 times during the segment, randomly select Function 34. Function 34 lasts 10 seconds and cannot occur concurrently with Function 13, 38, 47, or 49.		Start Function 39 when Function 61 ends. Function 39 lasts 240 seconds. Interrupt Function 39 when Function 33, 34, 37, 38, 47, 48, 49, or 50 occurs. Start Function 19 when Function 39 ends. Function 19 lasts 27 seconds. Interrupt Function 19 when Function 33, 37, 47, or 49 occurs.	Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50. 6 times during the segment, randomly select Function 33. Function 33 lasts 10 seconds and cannot occur concurrently with Function 52 or 60.	

*Denotes a segment that occurs in more than one mission phase.

PHASE 3 Enroute (Rendezvous - LZ)**SEGMENT 08 NOE Flight [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	15 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13 or 38. 6 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 13, 47, or 49. 10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.	Start Segment 08 with Function 03. Function 03 lasts 600 seconds. Interrupt Function 03 when Function 13 occurs. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13 or 38 occurs.		Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 6 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, or 58. 8 times during the segment, randomly select Function 05. Function 05 lasts 1 second.	Start Segment 08 with Function 58. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 37, 47, 49, or 59 occurs.
	Continued...			Continued...	

PHASE 3 Enroute (Rendezvous - LZ)**SEGMENT 08 NOE Flight [ANVIS] [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.			Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50. 6 times during the segment, randomly select Function 59. Function 59 lasts 17.5 seconds and cannot occur concurrently with Function 05 of 37.	

PHASE 3 Enroute (Rendezvous - LZ)

SEGMENT 09 NOE Flight [ANVIS/ASE]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
350 seconds after Segment 09 begins, start Function 65. Function 65 lasts 60 seconds.	15 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 38, or 51, 65, or 68. 5 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 65. 10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, 49, or 65. Continued...	Start Segment 09 with Function 03. Function 03 lasts 600 seconds. Interrupt Function 03 when Function 65 occurs. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13, 38, or 165 occurs.		Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 8 times during the segment, randomly select Function 05. Function 05 lasts 1 second and cannot occur concurrently with Function 68. 3 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, or 51.	Start Segment 09 with Function 58. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 35, 37, 47, 49, 51, 65, or 68 occurs.
			Start Function 65 when Function 65 occurs for the pilot. Interrupt Function 58 when Function 65 occurs. Function 65 lasts 60 seconds and cannot occur concurrently with Function 05, 37, 47, or 49. Start Function 51 when Function 65 ends. Function 51 lasts 20.5 seconds. Continued...		

PHASE 3 Enroute (Rendezvous - LZ)**SEGMENT 09 NOE Flight [ANVIS/ASE] [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 51.		Start Function 68 60 seconds after Function 51 ends. Function 68 lasts 21.5 seconds.	5 times during the segment, randomly select Function 35. Function 35 lasts 10 seconds and cannot occur concurrently with Function 05, 37, 47, 49, 51, 65, or 68. Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	

PHASE 3 Enroute (Rendezvous - LZ)

SEGMENT 10 Approach (LZ) [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Segment 10 with Function 21. Function 21 lasts 7.5 seconds.	6 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 09, 21, or 38. 2 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 09, 47, or 49. 8 times during the segment, randomly select Function 09. Function 09 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.	Start Function 01 when Function 21 ends. Function 01 lasts 340 seconds. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 09, 21, or 38 occurs.	Start Segment 10 with Function 43. Function 43 lasts 26 seconds. Interrupt Function 43 when Function 37, 47, 48, 49, or 50 occurs.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 4 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 48, 49, or 50. Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	Start Function 30 at the beginning of the segment. Function 30 lasts until the end of the segment. Interrupt Function 30 when Function 37 or 43 occurs.
	Continued...				

PHASE 3 Enroute (Rendezvous - LZ)SEGMENT 10 Approach (LZ) [ANVIS] [Continued]

PILOT		COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM
	15 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.			

PHASE 3 Enroute (Rendezvous - LZ)SEGMENT 11 Landing (LZ/Internal Load) [ANVIS]

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
<p>Start Segment 11 with Function 23. Function 23 lasts 3.5 seconds.</p> <p>Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.</p> <p>Start Function 25 when Function 56 ends. Function 25 lasts 43 seconds.</p>	<p>3 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each.</p> <p>12 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 67.</p>	<p>Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment.</p> <p>Start Function 32 when Function 25 ends. Function 32 lasts until the end of the segment.</p>	<p>Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.</p> <p>Start Function 25 when Function 56 ends. Function 25 lasts 43 seconds.</p> <p>Start Function 67 when Function 25 ends. Function 67 lasts 21 seconds.</p>	<p>Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.</p> <p>Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.</p>	<p>Start Function 30 at the beginning of the segment. Function 30 lasts until the end of the segment. Interrupt Function 30 when Function 67 occurs.</p>

PHASE 4 Enroute (LZ - Rendezvous)**SEGMENT 12 Before Takeoff (LZ)**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	<p>2 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each.</p> <p>5 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.</p>	<p>Start Function 32 at the beginning of the segment. Function 32 lasts until the end of the segment.</p> <p>Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment.</p>	<p>Start Segment 12 with Function 45. Function 45 lasts 31 seconds. Interrupt Function 45 when Function 47, 48, 49, or 50 occurs.</p> <p>Start Function 69 when Function 45 ends. Function 69 lasts 9.5 seconds. Interrupt Function 69 when Function 47 or 49 occurs.</p>	<p>Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.</p> <p>Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.</p>	

PHASE 4 Enroute (LZ - Rendezvous)***SEGMENT 03 Takeoff [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Segment 03 with Function 23. Function 23 lasts 3.5 seconds.	3 times during the segment, randomly select (.50) Function 47 or Function 49.	Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 11, 14, 22, 23, 24, or 38 occurs.	Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.	Start Function 29 at the beginning of the segment. Function 29 lasts until the end of the segment. Interrupt Function 29 when Function 47 or 49 occurs.
Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.	Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 24.			3 times during the segment, randomly select Function 37.	Start Function 30 at the beginning of the segment. Function 30 lasts until the end of the segment. Interrupt Function 30 when Function 37 occurs.
Start Function 22 when Function 56 ends. Function 22 lasts 4.5 seconds.	3 times during the segment, randomly select Function 38.			Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 11, 14, 24, 47, or 49.	
Start Function 02 when Function 56 ends. Function 02 lasts 30 seconds.	Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 11, 14, 24, 47, or 49.				
Start Function 24 when Function 02 ends. Function 24 lasts 5 seconds.	3 times during Function 02, randomly select Function 11. Function 11 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.			Continued...	
Continued...	Continued...				

* Denotes a segment that occurs in more than one mission phase.

PHASE 4 Enroute (LZ - Rendezvous)***SEGMENT 03 Takeoff [ANVIS] [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 04 when Function 02 ends. Function 04 lasts 60 seconds.	3 times during Function 04, randomly select Function 14. Function 14 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49. 20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.			Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	

*Denotes a segment that occurs in more than one mission phase.

PHASE 4 Enroute (LZ - Rendezvous)**SEGMENT 13 NOE Flight (Route Change) [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	5 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 28, 38, or 70.	Start Segment 13 with Function 03. Function 03 lasts 600 seconds. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13 or 38 occurs.		Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 8 times during the segment, randomly select Function 05. Function 05 lasts 1 second. 3 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Functions 28, 47, 49, 58, or 70. Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	Start Segment 13 with Function 58. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 28, 37, 47, 49, or 70 occurs.
	5 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 13, 47, or 49.		400 seconds after Segment 13 begins, start Function 28. Function 28 lasts 18 seconds.		
	10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49.		Start Function 70 when Function 28 ends. Function 70 lasts 132.5 seconds. Interrupt Function 70 when Function 05, 47, or 49 occurs.		
	Continued...				

PHASE 4 Enroute (LZ - Rendezvous)SEGMENT 13 NOE Flight (Route Change) [ANVIS] [Cont.]

PILOT		COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47 or 49.			

PHASE 4 Enroute (LZ - Rendezvous)***SEGMENT 07 Rendezvous [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	7 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 38, 52, or 60.	Start Segment 07 with Function 04. Function 04 lasts until the end of the segment. Interrupt Function 04 when Function 13 occurs. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13, 34, or 38 occurs.	Start Segment 07 with Function 52. Function 52 lasts 22.5 seconds. Start Function 60 when Function 52 ends. Function 60 lasts 7.5 seconds. Start Function 57 when Function 60 ends. Function 57 lasts 10.5 seconds. Interrupt Function 57 when Function 33, 37, 47, or 49 occurs.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 2 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, 52, or 60.	
Start Function 61 when Function 57 ends. Function 61 lasts 62.5 seconds. Interrupt Function 61 when Function 38, 47, or 49 occurs.	Continued...	Continued...	Continued...	Continued...	

*Denotes a segment that occurs in more than one mission phase.

PHASE 4 Enroute (LZ - Rendezvous)***SEGMENT 07 Rendezvous [ANVIS] [Continued]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Function 39 when Function 61 ends. Interrupt Function 39 lasts 240 seconds. Interrupt Function 39 when Function 38, 47, or 49 occurs.	10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, 49 or 61. 20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 52. 6 times during the segment, randomly select Function 34. Function 34 lasts 10 seconds and cannot occur concurrently with Function 13, 38, 47, or 49.		Start Function 39 when Function 61 ends. Interrupt Function 39 lasts 240 seconds. Interrupt Function 39 when Function 33, 34, 37, 38, 47, 48, 49, or 50 occurs. Start Function 19 when Function 39 ends. Interrupt Function 19 lasts 27 seconds. Interrupt Function 19 when Function 33, 37, 47, or 49 occurs.	Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50. 6 times during the segment, randomly select Function 33. Function 33 lasts 10 seconds and cannot occur concurrently with Function 52 or 60.	

*Denotes a segment that occurs in more than one mission phase.

PHASE 5 Enroute (Rendezvous - Base)***SEGMENT 06 Contour Flight (Update) [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	15 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 13, 38, 57, or 71. 5 times during the segment, randomly select Function 38. Function 38 lasts 3.5 seconds and cannot occur concurrently with Function 13, 47, or 49. 10 times during the segment, randomly select Function 13. Function 13 lasts 1 second and cannot occur concurrently with Function 38, 47, or 49. Continued...	Start Segment 06 with Function 03. Function 03 lasts 600 seconds. Interrupt Function 03 when Function 13 occurs. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 13, 34, 36, or 38 occurs.	Start Function 68 120 seconds after Segment 06 begins. Function 68 lasts 21.5 seconds. Start Function 71 500 seconds after Segment 06 begins. Function 71 lasts 12.5 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 5 times during the segment, randomly select Function 05. Function 05 lasts 1 second. 3 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, 54, 58, 68, or 71. Continued...	Start Segment 06 with Function 58. Function 58 lasts until the end of the segment. Interrupt Function 58 when Function 05, 37, 47, 49, 54, 68, or 71 occurs.

*Denotes a segment that occurs in more than one mission phase.

PHASE 5 Enroute (Rendezvous - Base)***SEGMENT 06 Contour Flight (Update) [ANVIS] [Cont.]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
	20 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 54.			2 times during the segment, randomly select Function 54. Function 54 lasts 14 seconds and cannot occur concurrently with Function 37, 47, 49, 58, 68, or 71.	
	6 times during the segment, randomly select Function 34. Function 34 lasts 10 seconds and cannot occur concurrently with Function 13, 36, 38, 47, or 49.			Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	
	6 times during the segment, randomly select Function 36. Function 36 lasts 10 seconds and cannot occur concurrently with Function 13, 34, 38, 47, or 49.				

*Denotes a segment that occurs in more than one mission phase.

PHASE 5 Enroute (Rendezvous - Base)**SEGMENT 14 Approach [ANVIS]**

PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Segment 14 with Function 21. Function 21 lasts 7.5 seconds.	5 times during the segment, randomly select (.50) Function 47 or Function 49. Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 09, 38, or 52.	Start Function 01 at the beginning of the segment. Function 01 lasts 340 seconds. Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 09, 21, or 38 occurs.	Start Segment 14 with Function 52. Function 52 lasts 22.5 seconds. Start Function 42 when Function 52 ends. Function 42 lasts 26 seconds. Interrupt Function 42 when Function 33, 37, 47, 48, 49, or 50 occurs. 200 seconds after the segment begins, start Function 54. Function 54 lasts 14 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49. 3 times during the segment, randomly select Function 37. Function 37 lasts 3.5 seconds and cannot occur concurrently with Function 47, 49, or 52. Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	Start Function 30 when Function 52 ends. Function 30 lasts until the end of the segment. Interrupt Function 30 when Function 33, 37, 42, or 54 occurs.
	Continued....			Continued....	

PHASE 5 Enroute (Rendezvous - Base)

SEGMENT 14 Approach [ANVIS] [Continued]

PILOT				COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	
	12 times during the segment, randomly select (.50) Function 48 or Function 50. Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, 52, or 54.			6 times during the segment, randomly select Function 33. Function 33 lasts 10 seconds and cannot occur concurrently with Function 37, 52, or 54.		

PHASE 5 Enroute (Rendezvous - Base)**SEGMENT 15 Landing [ANVIS]**

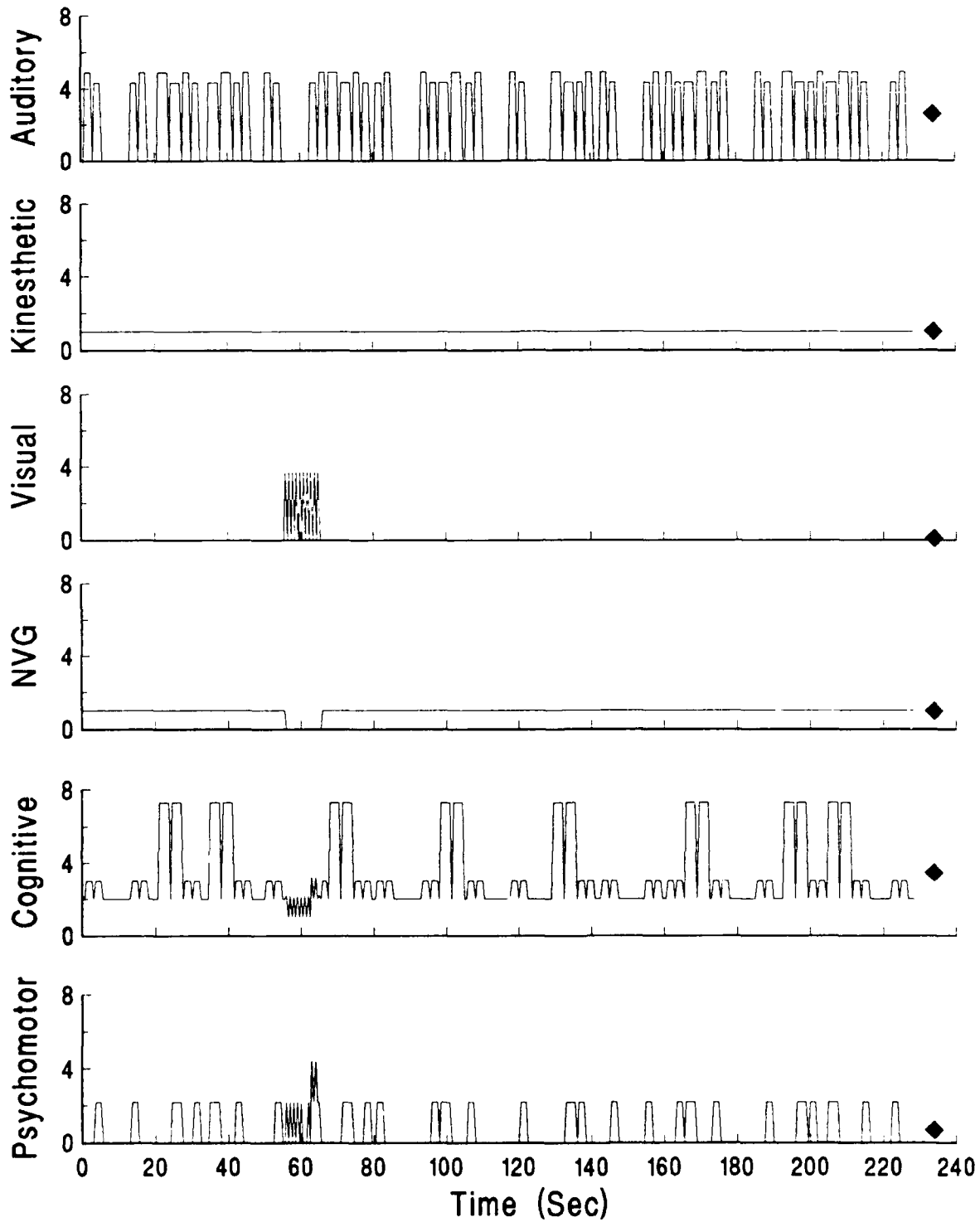
PILOT			COPILOT		
DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED	DISCRETE FIXED	DISCRETE RANDOM	CONTINUOUS FIXED
Start Segment 15 with Function 23. Function 23 lasts 3.5 seconds.	4 times during the segment, randomly select (.50) Function 47 or Function 49.	Start Function 31 at the beginning of the segment. Function 31 lasts until the end of the segment. Interrupt Function 31 when Function 23 occurs.	Start Function 53 when Function 23 ends. Function 53 lasts 13 seconds.	Insert Function 47 each time the pilot performs Function 47 and Function 49 each time the pilot performs Function 49.	Start Function 30 at the beginning of the segment. Function 30 lasts until the end of the segment. Interrupt Function 30 when Function 40 or 53 occurs.
Start Function 56 at the beginning of the segment. Function 56 lasts 220 seconds.	Functions 47 and 49 last 7 seconds each and cannot occur concurrently with Function 23 or 53.		Start Function 56 when Function 23 ends. Function 56 lasts 220 seconds.	Insert Function 48 each time the pilot performs Function 48 and Function 50 each time the pilot performs Function 50.	
Start Function 25 when Function 56 ends. Function 25 lasts 43 seconds.	12 times during the segment, randomly select (.50) Function 48 or Function 50.	Start Function 32 when Function 25 ends. Function 32 lasts until the end of the segment.	Start Function 25 when Function 56 ends. Function 25 lasts 43 seconds.		
Start Function 40 when Function 25 ends. Function 40 lasts 11.5 seconds.	Functions 48 and 50 last 5 seconds each and cannot occur concurrently with Function 47, 49, or 53.		Start Function 40 when Function 25 ends. Function 40 lasts 11.5 seconds.		

A P P E N D I X L

MH-60K PILOT WORKLOAD PREDICTION GRAPHS

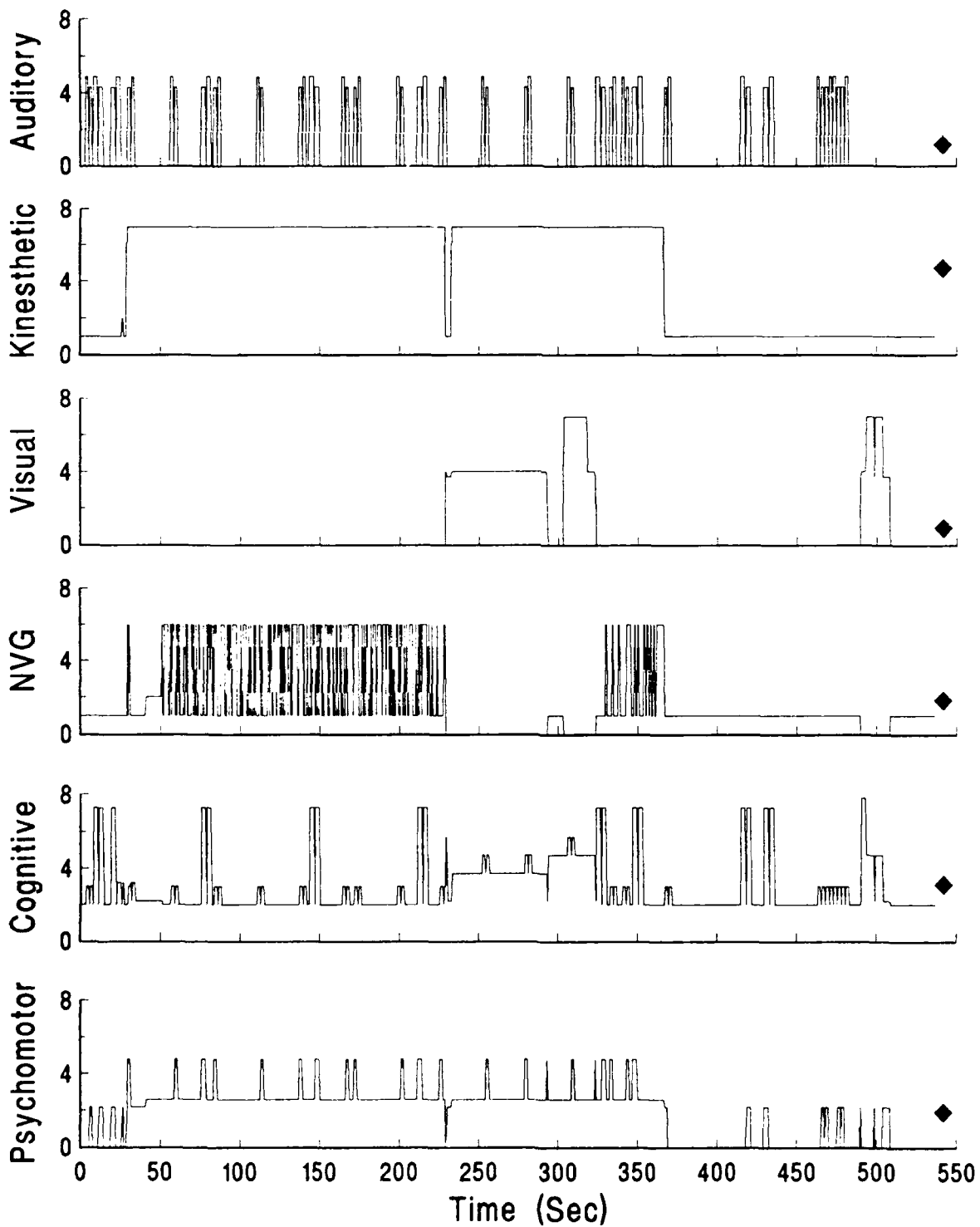
This appendix contains the workload prediction graphs for the pilot for each of the 15 MH-60K segments. Each page displays the predicted pilot workload for one segment using 6 graphs; one for each workload component. The diamond at the end of each graph indicates the average component workload for the segment.

Segment 01: Configure Systems for Mission Pilot - MH-60K



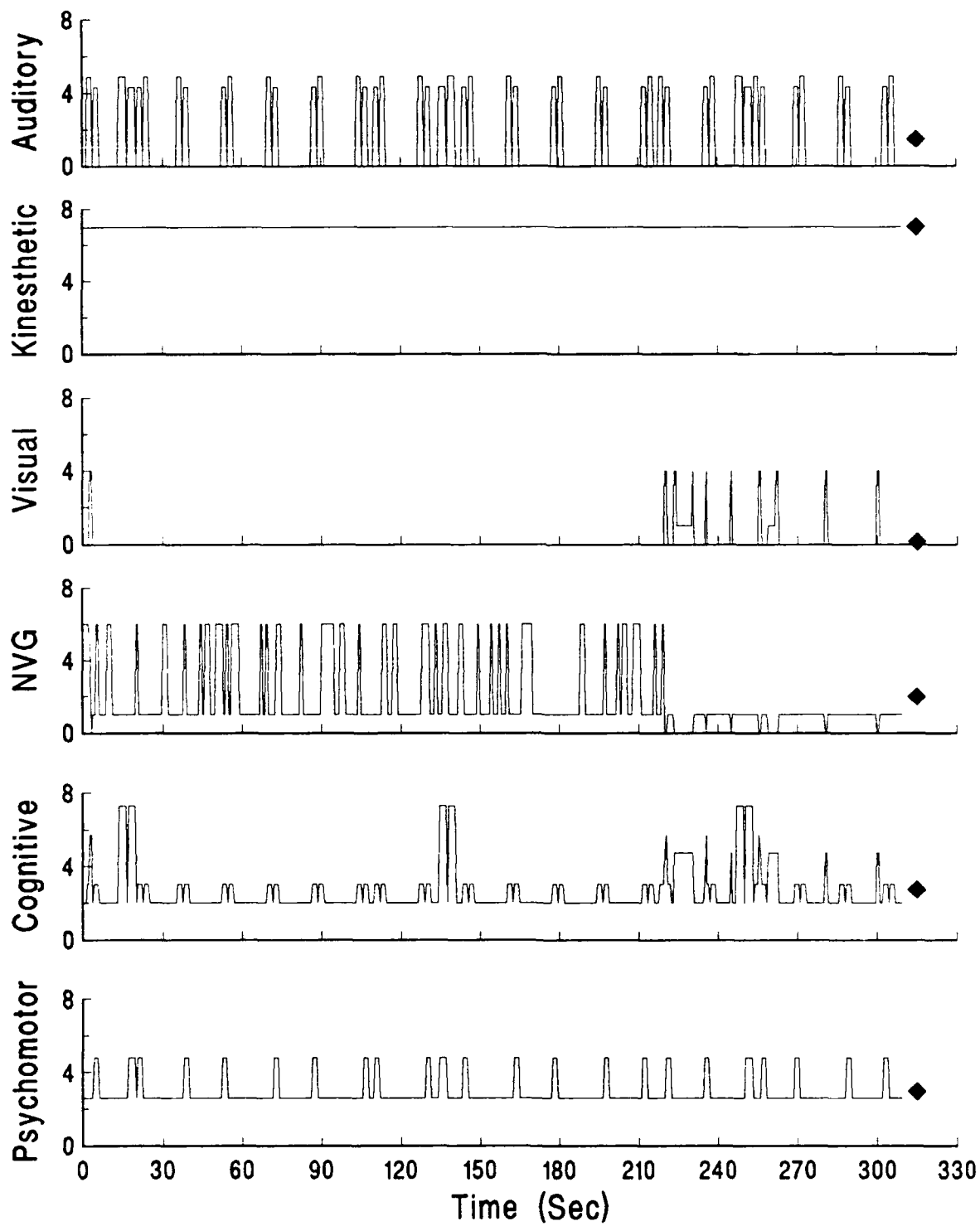
Segment 02: Before Takeoff (Base/Internal Load)

Pilot - MH-60K

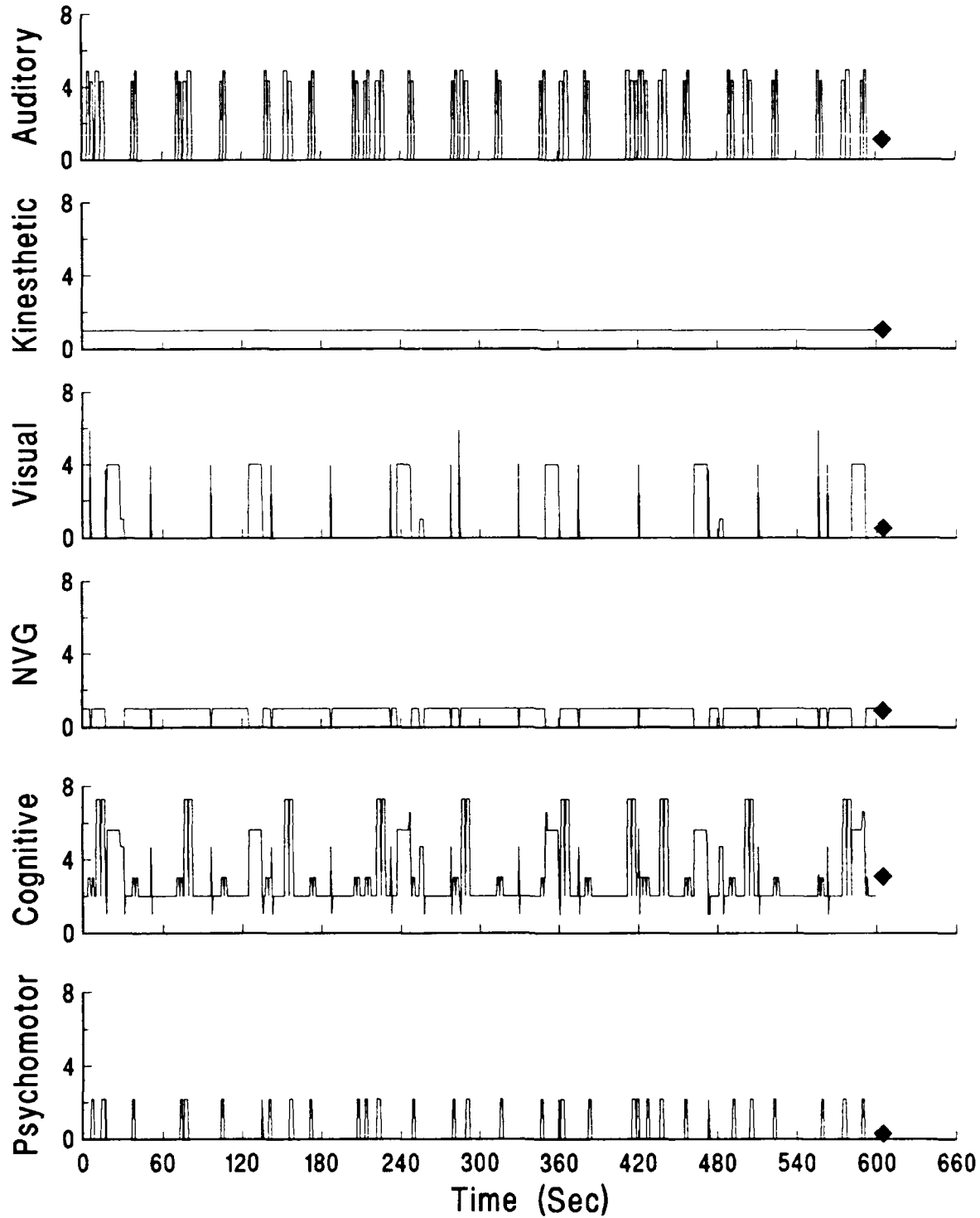


Segment 03: Takeoff [ANVIS]

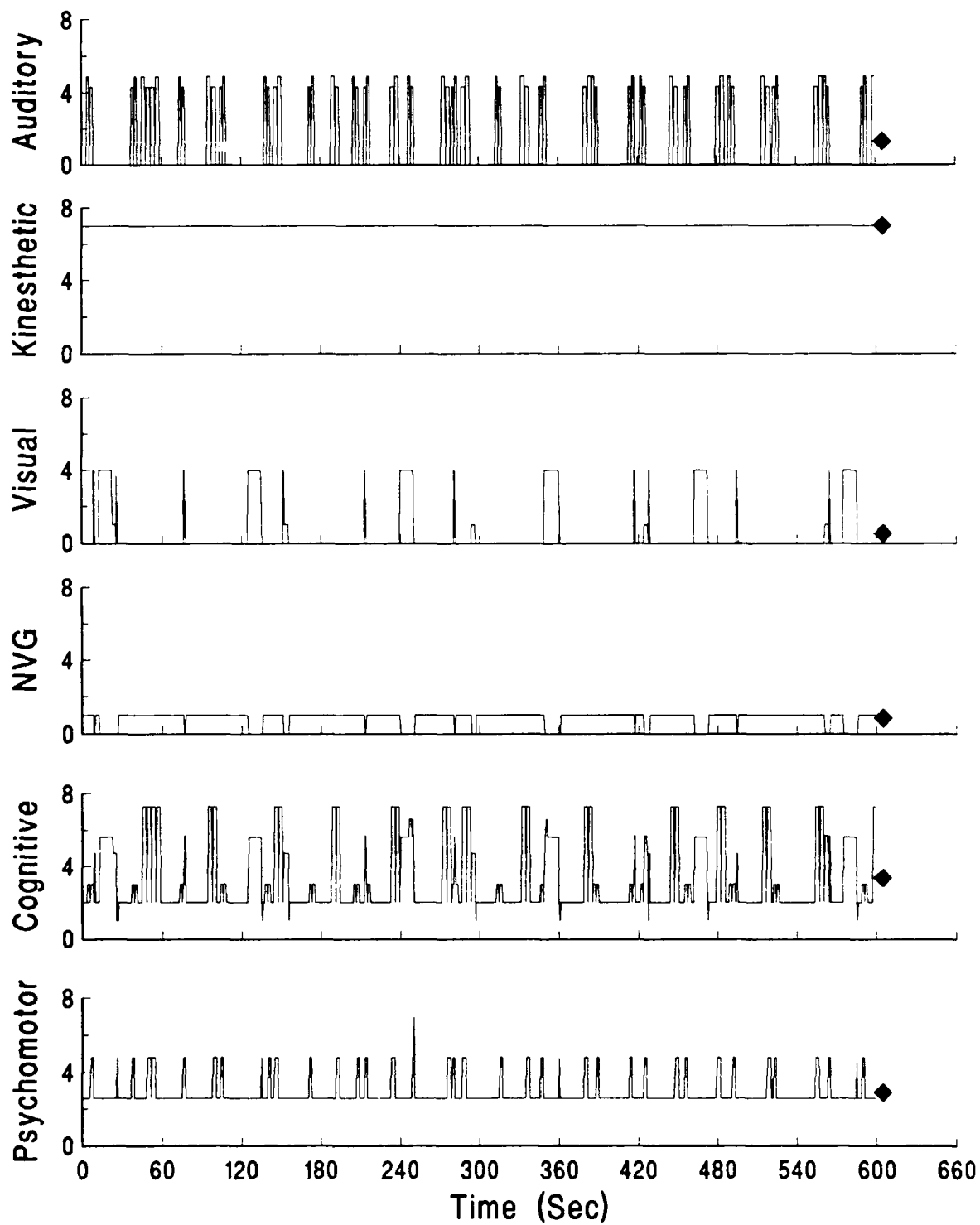
Pilot - MH-60K



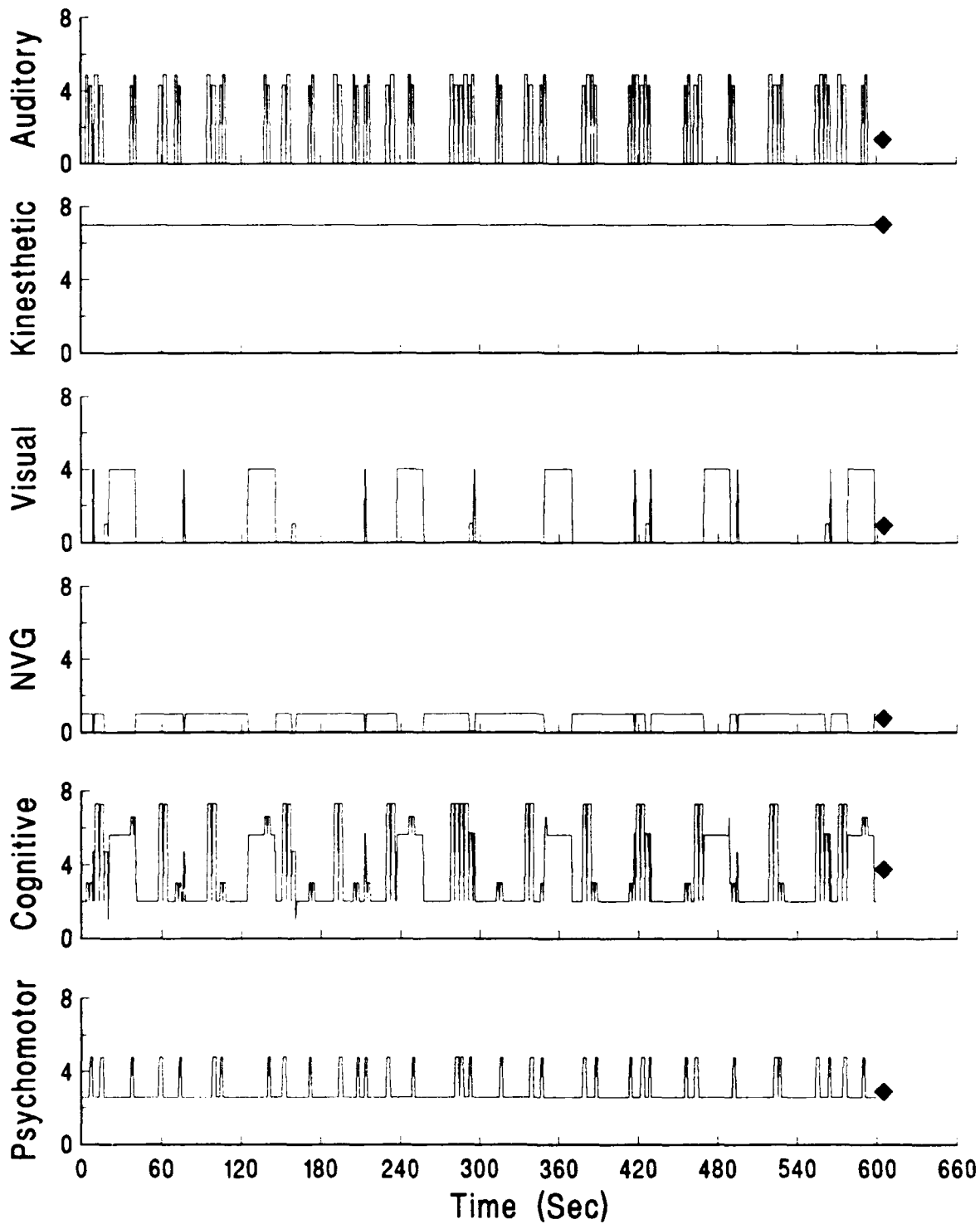
Segment 04: Enroute Flight
Pilot - MH-60K



Segment 05: Contour Flight (No Update) [ANVIS]
Pilot - MH-60K

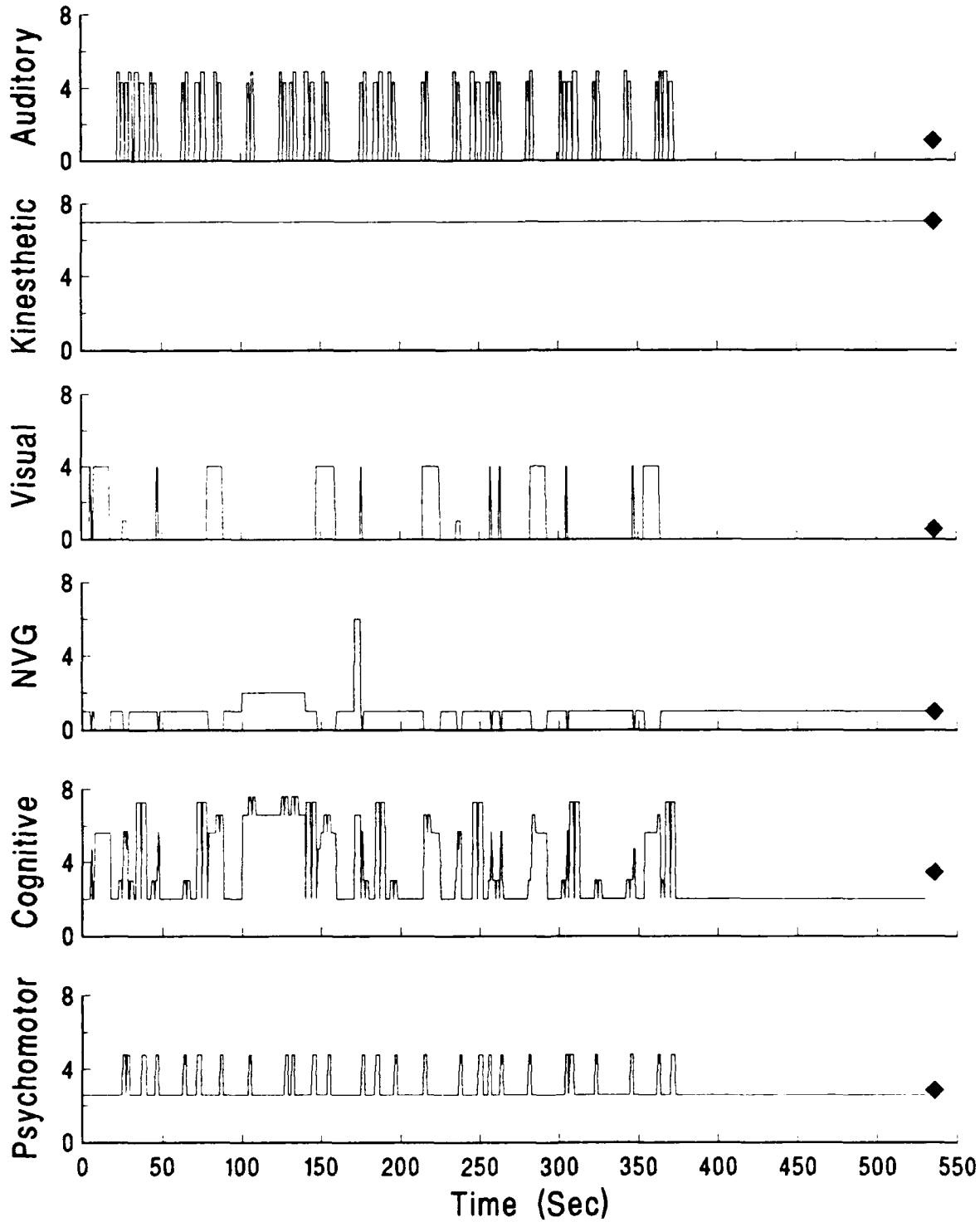


Segment 06: Contour Flight (Update) [ANVIS]
Pilot - MH-60K



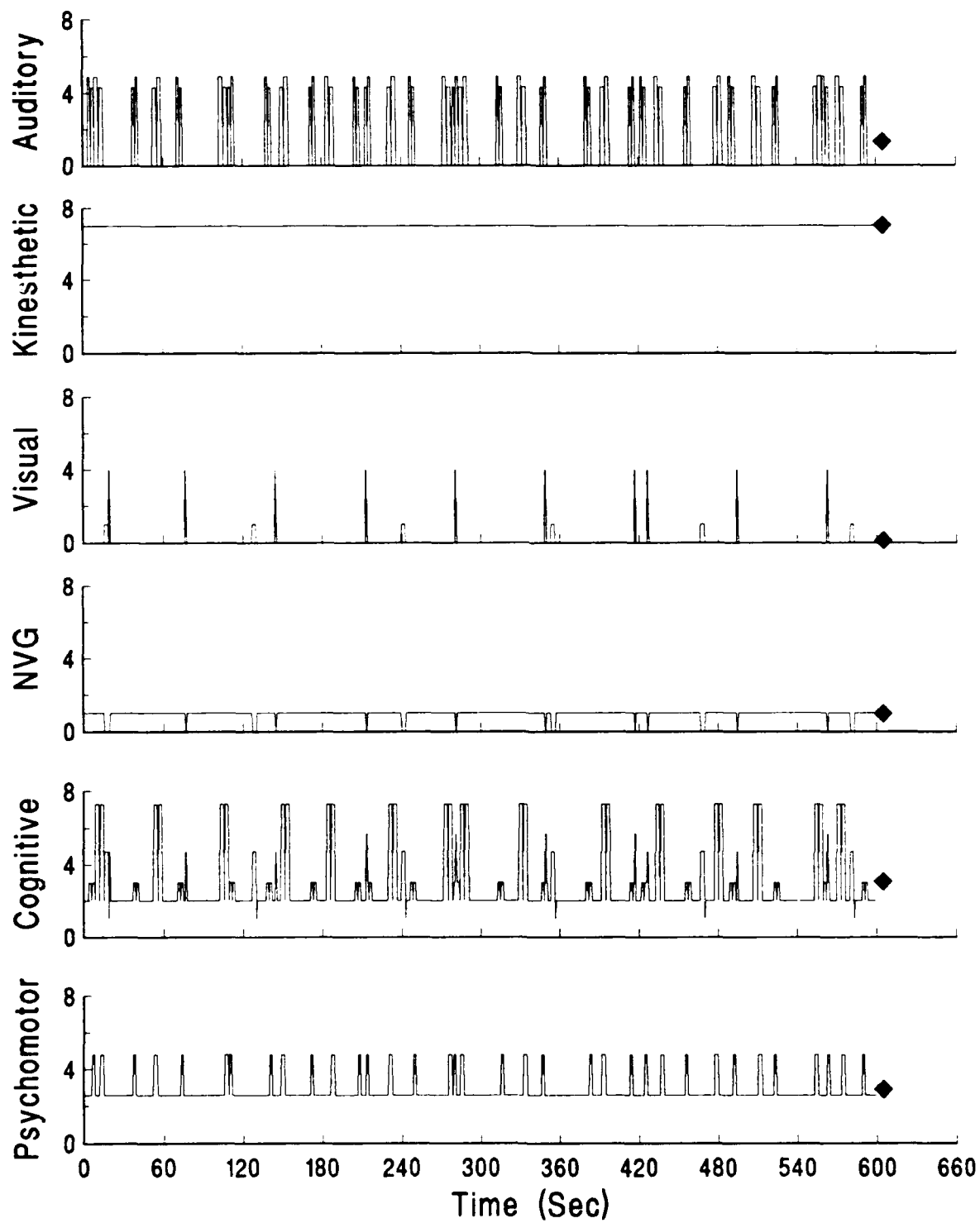
Segment 07: Rendezvous [ANVIS]

Pilot - MH-60K

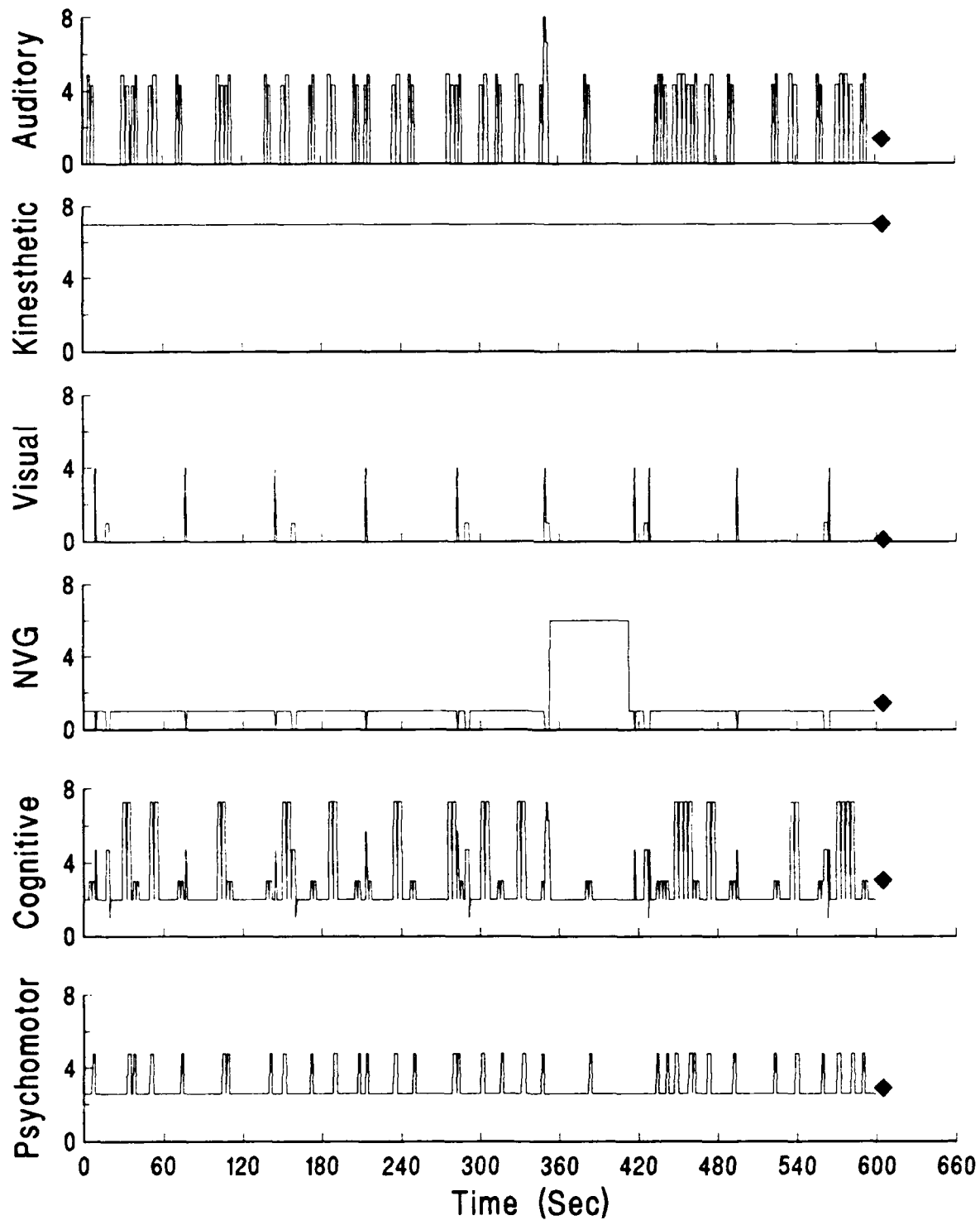


Segment 08: NOE Flight [ANVIS]

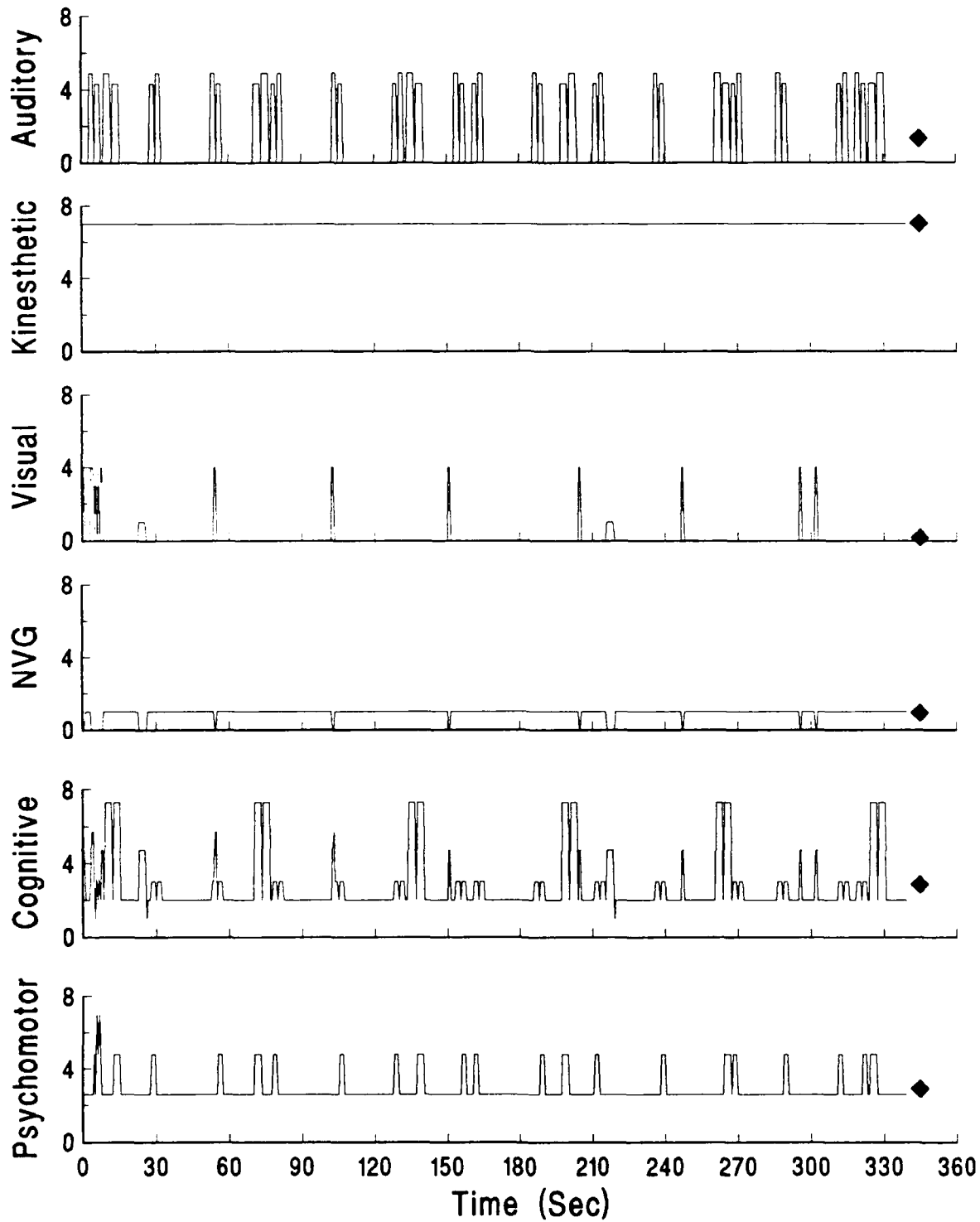
Pilot - MH-60K



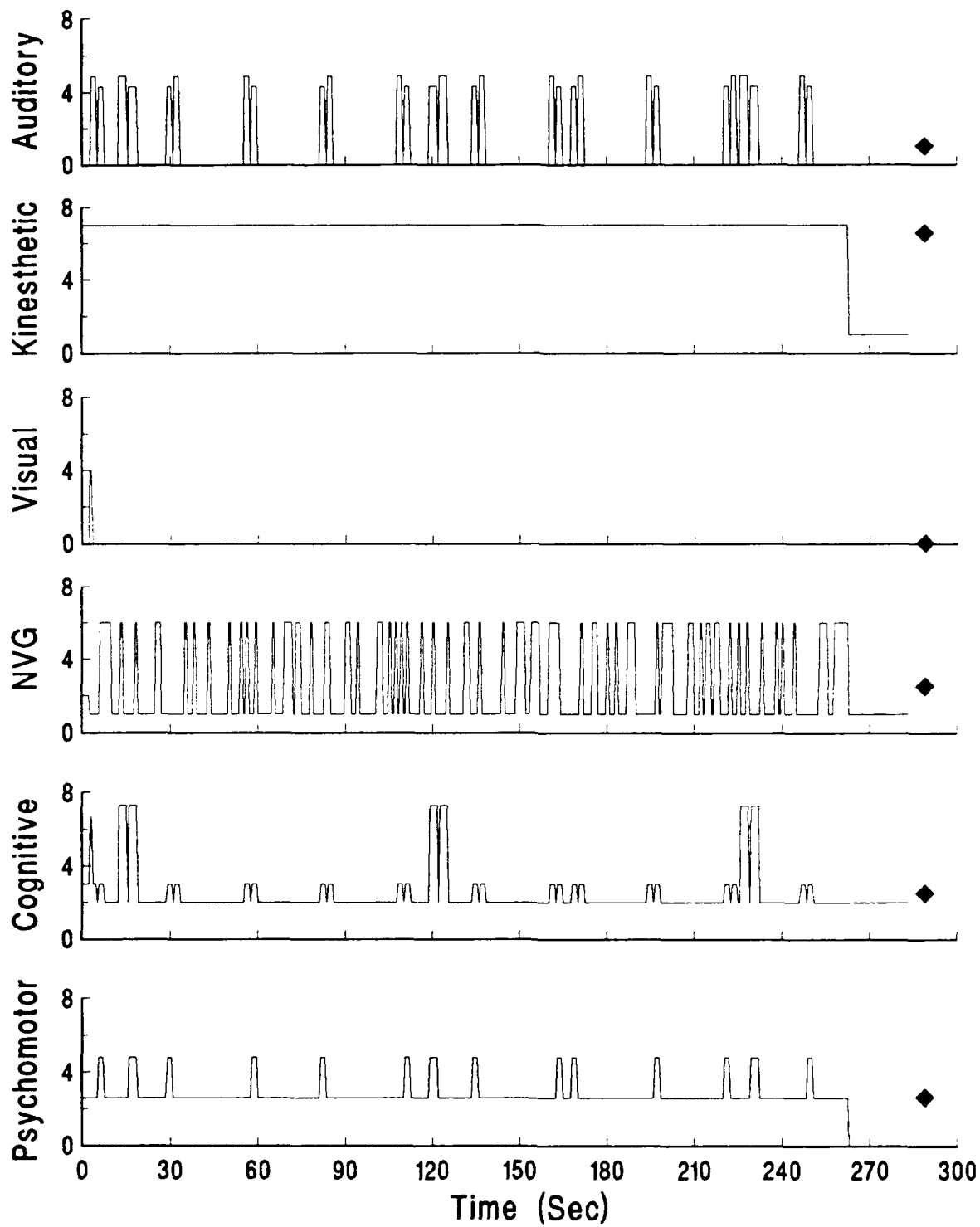
Segment 09: NOE Flight [ANVIS/ASE]
Pilot - MH-60K



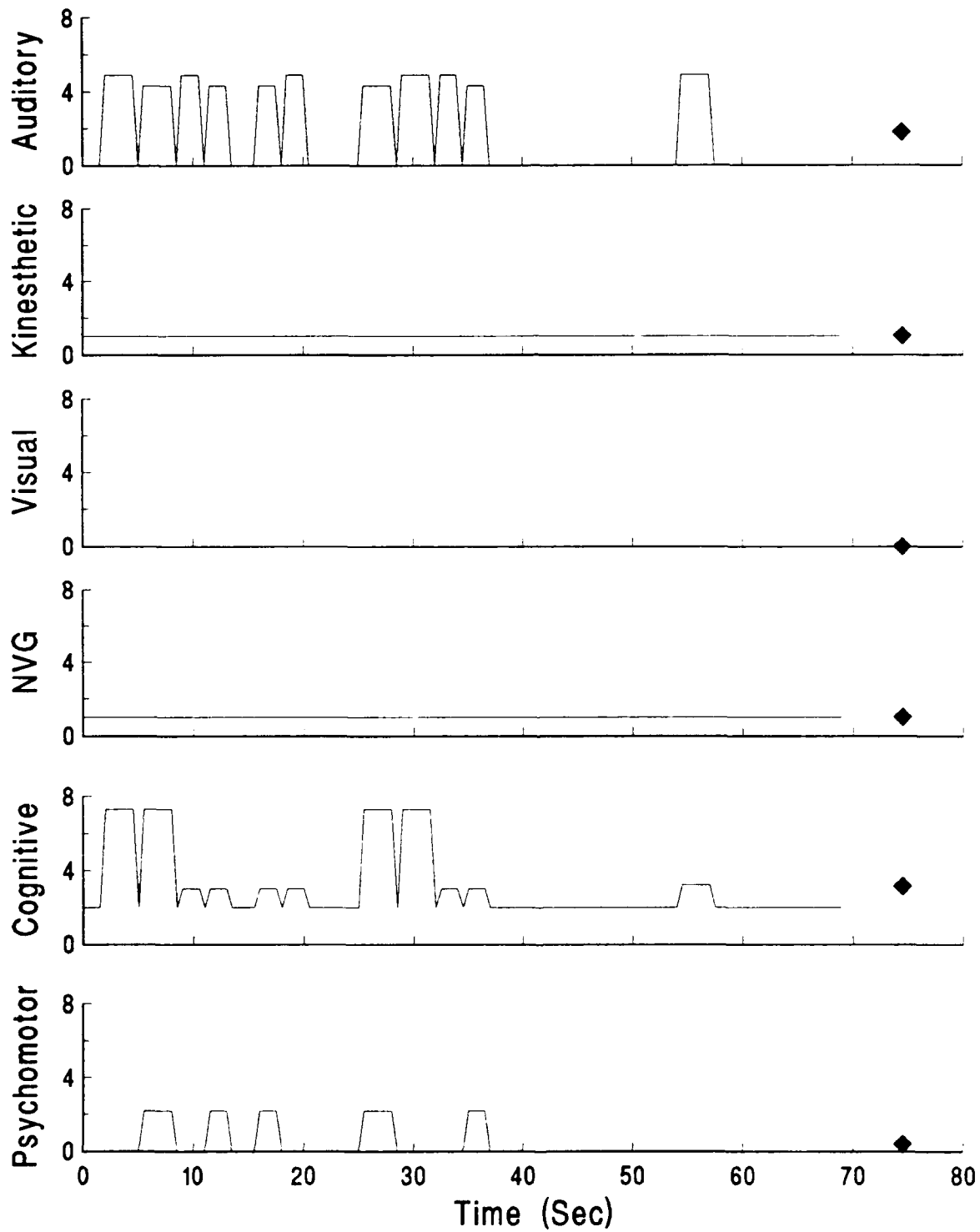
Segment 10: Approach (LZ) [ANVIS]
Pilot - MH-60K



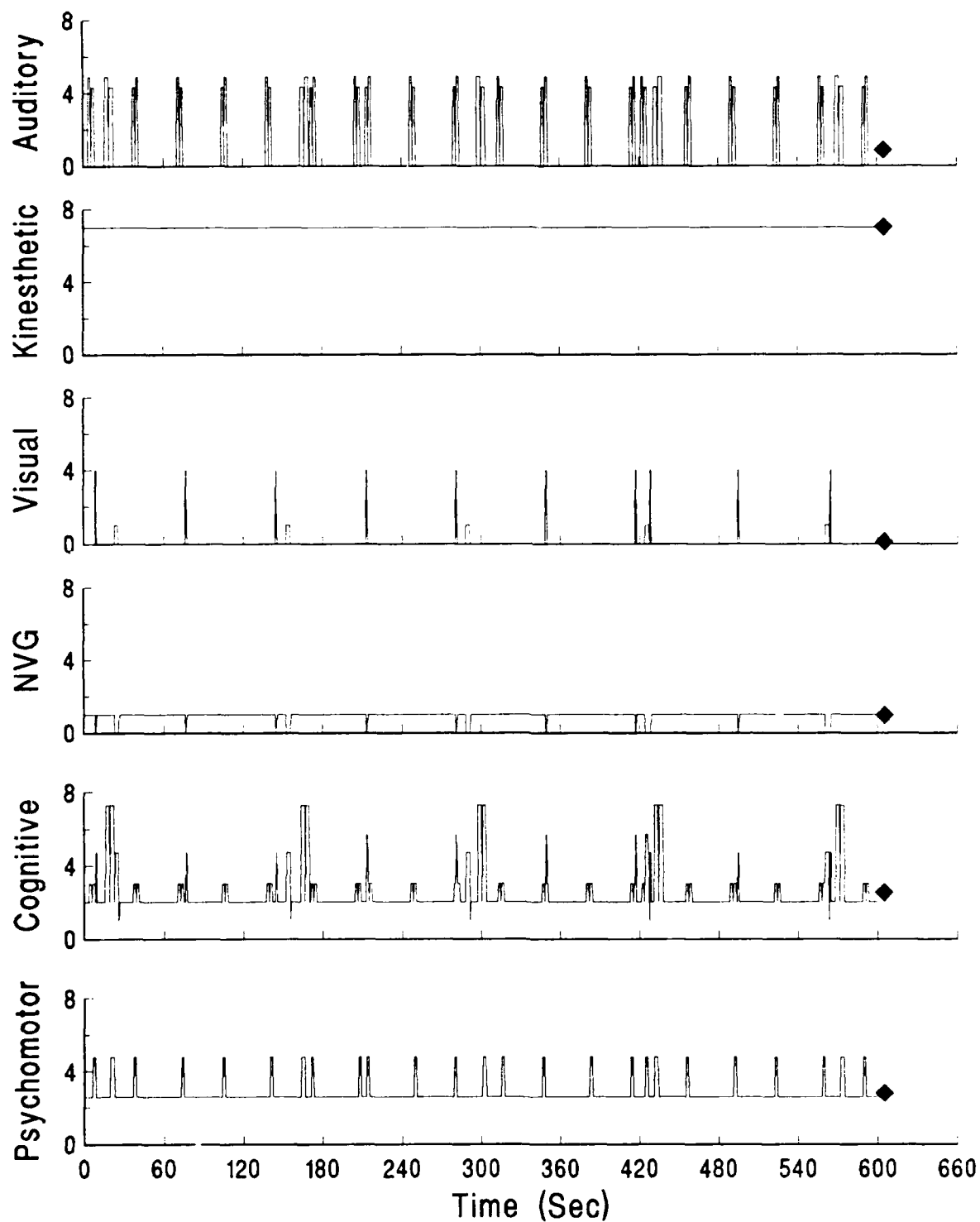
Segment 11: Landing (LZ/Internal Load) [ANVIS]
Pilot - MH-60K



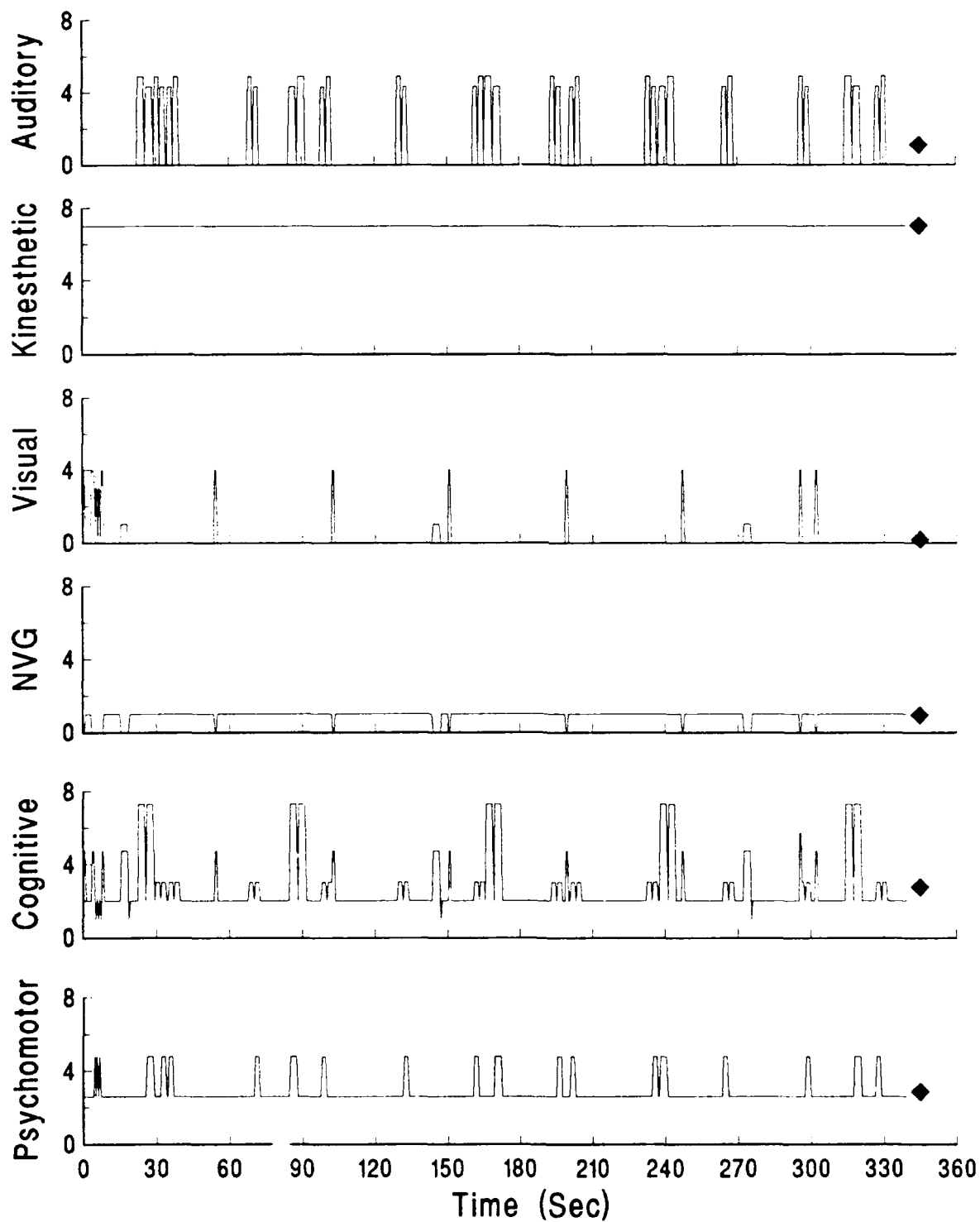
Segment 12: Before Takeoff (LZ)
Pilot - MH-60K



Segment 13: NOE Flight (Route Change) [ANVIS]
Pilot - MH-60K

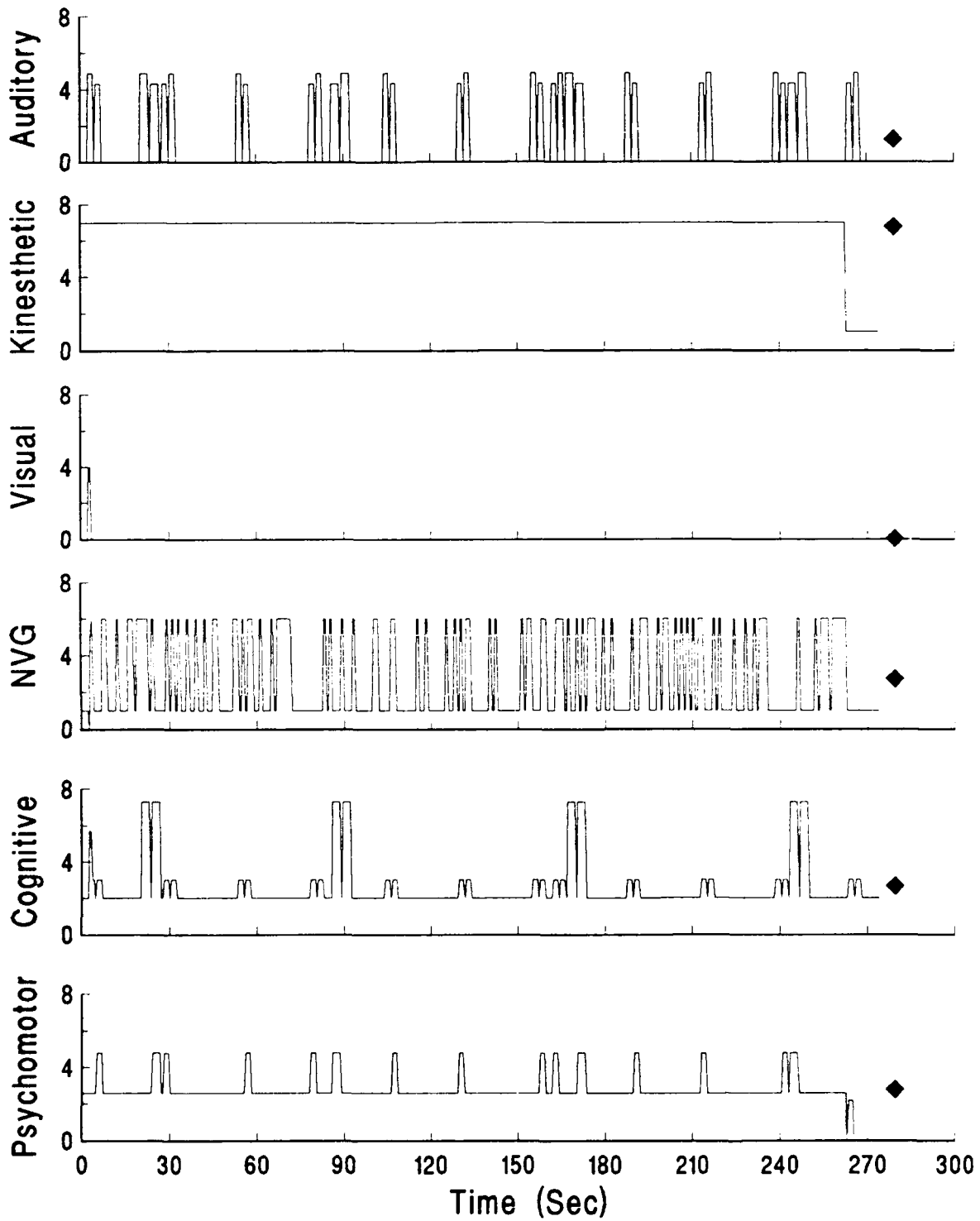


Segment 14: Approach [ANVIS]
Pilot - MH-60K



Segment 15: Landing [ANVIS]

Pilot - MH-60K

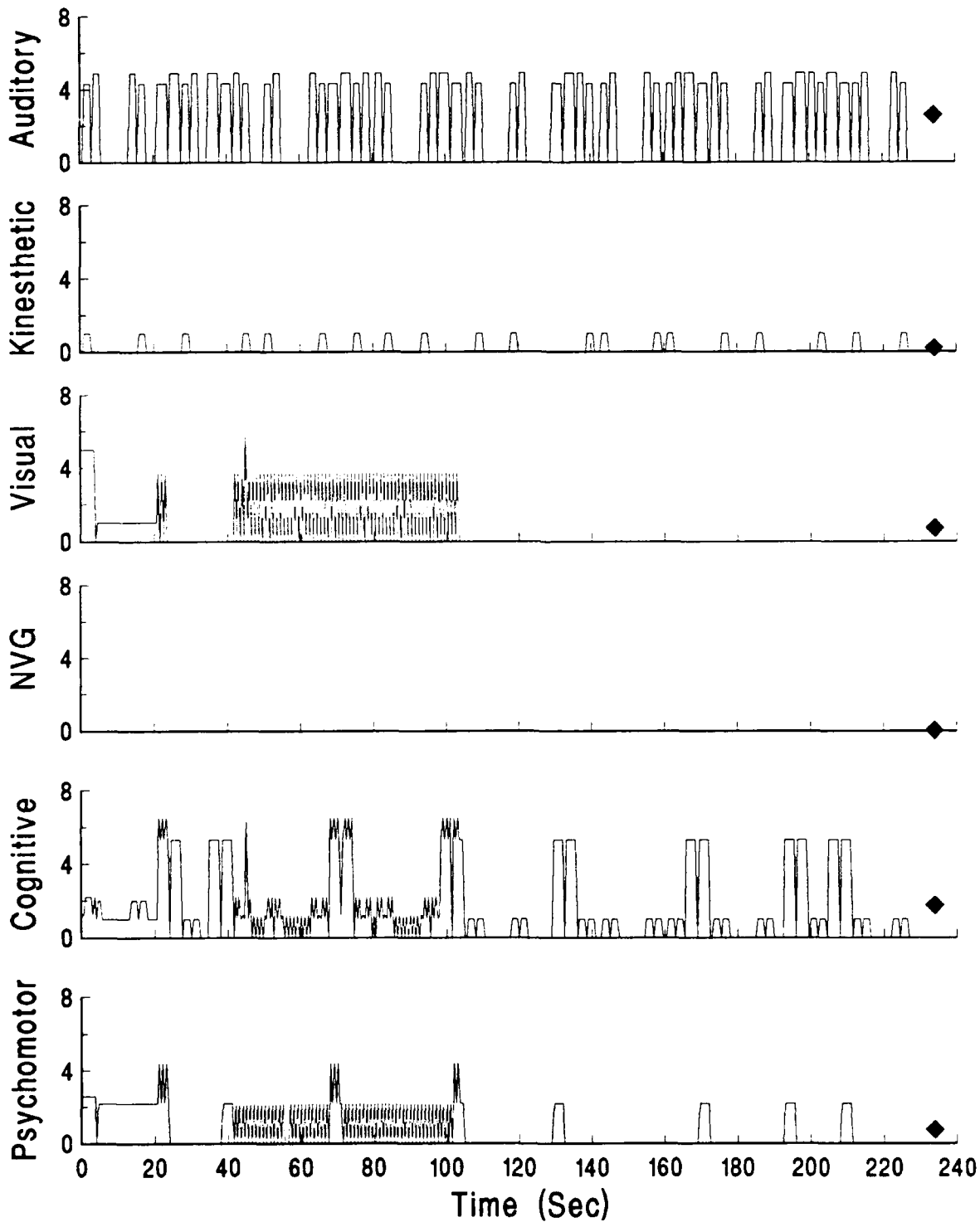


A P P E N D I X M

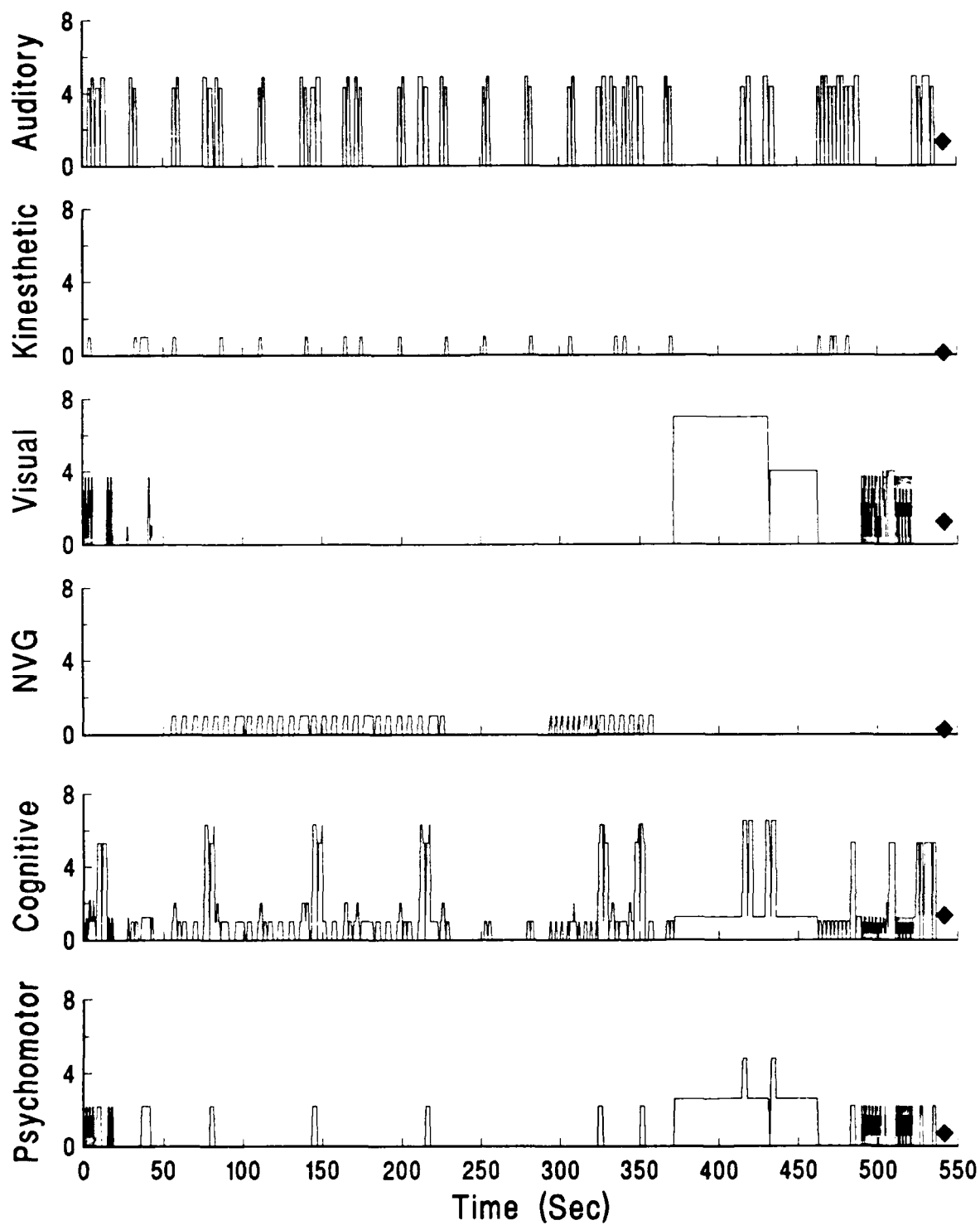
MH-60K COPILOT WORKLOAD PREDICTION GRAPHS

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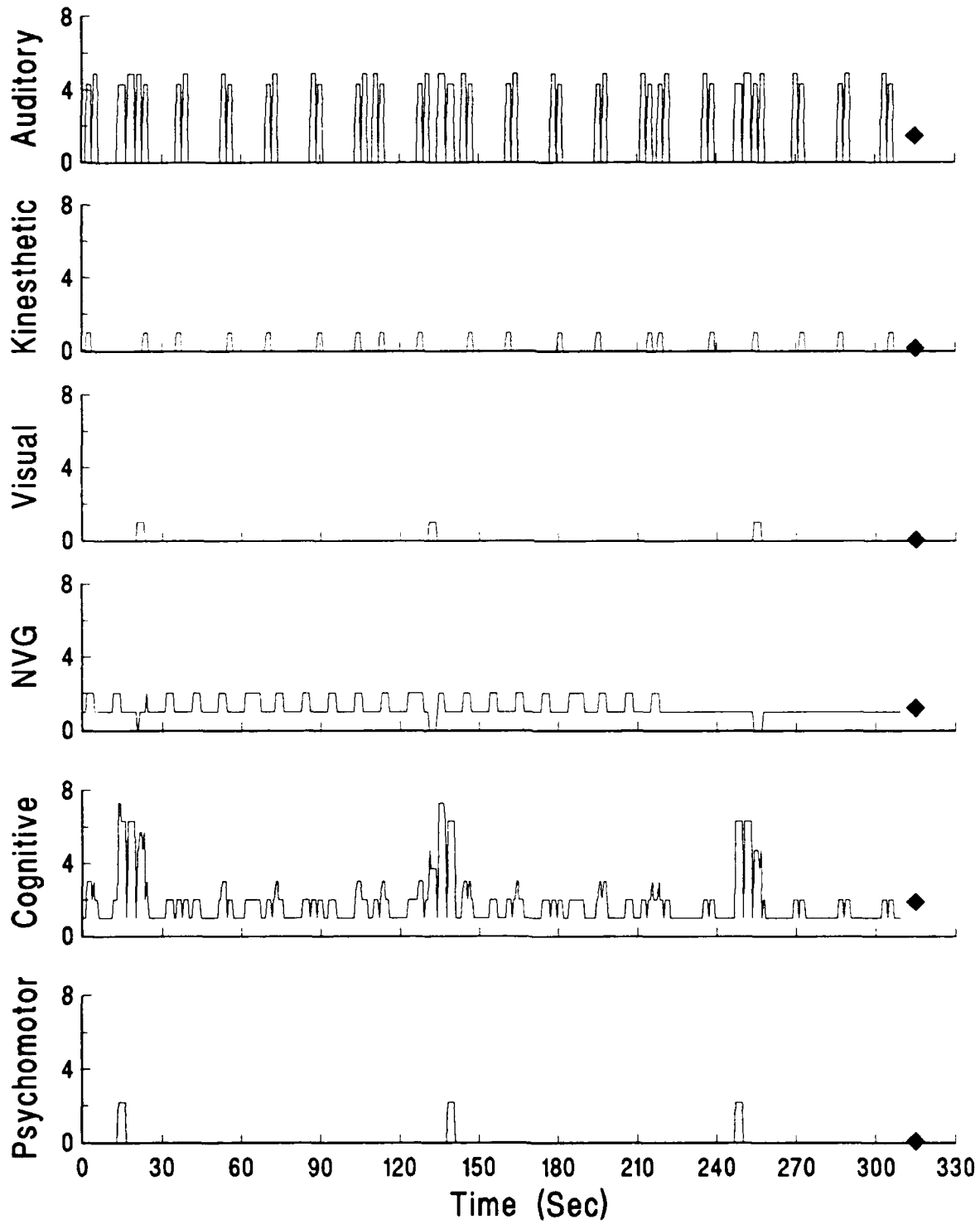
Segment 01: Configure Systems for Mission
Copilot - MH-60K



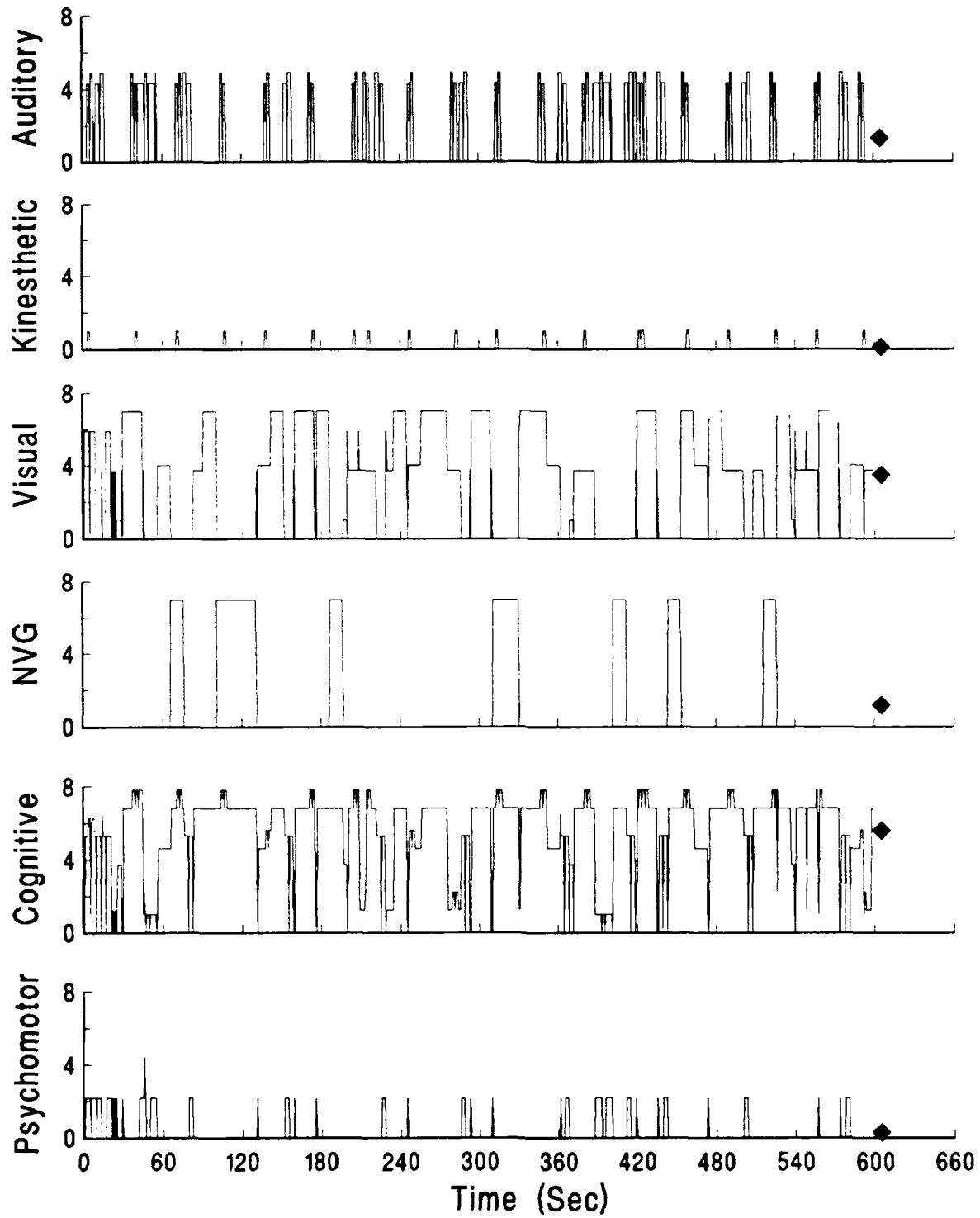
Segment 02: Before Takeoff (Base/Internal Load)
Copilot - MH-60K



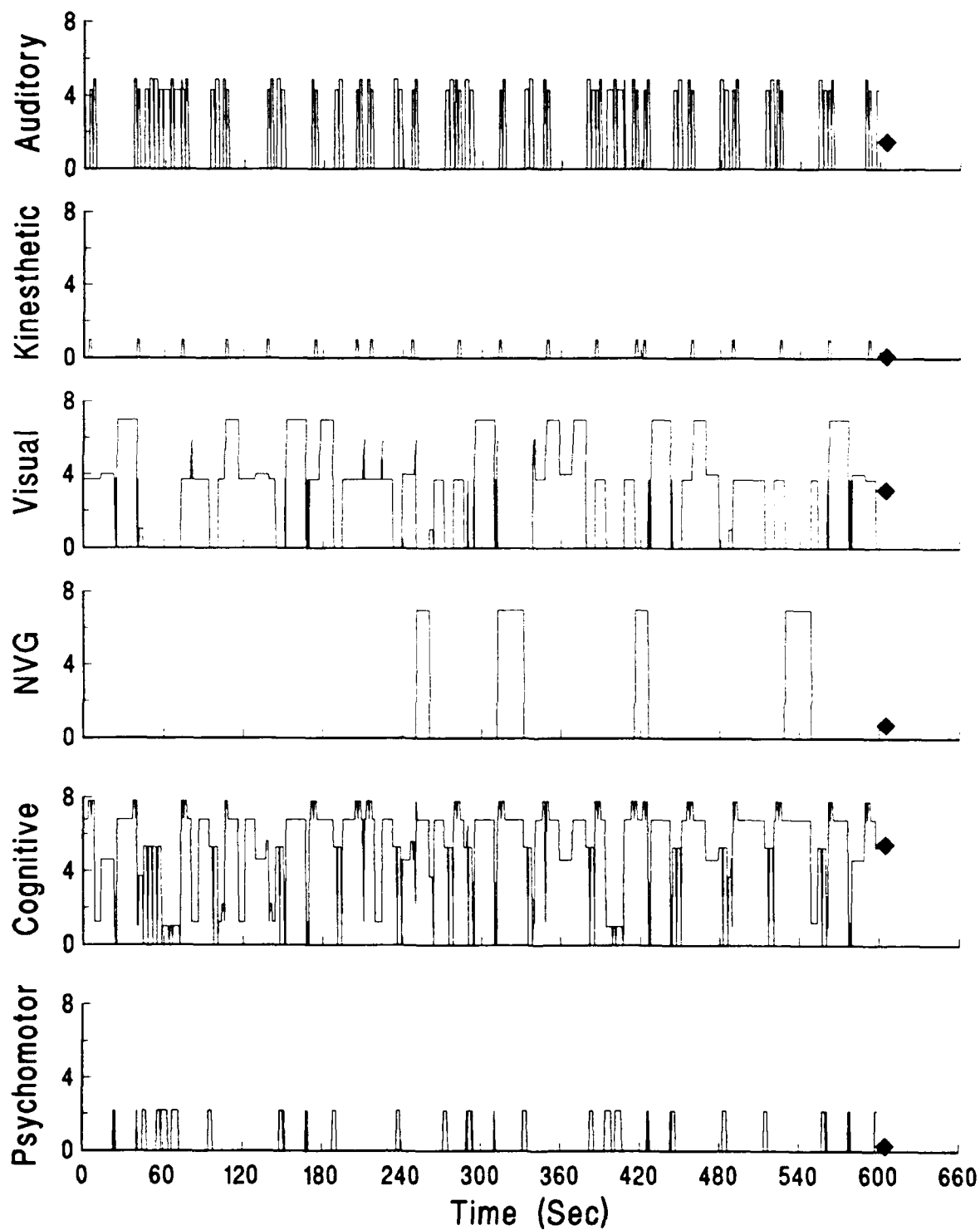
Segment 03: Takeoff [ANVIS]
Copilot - MH-60K



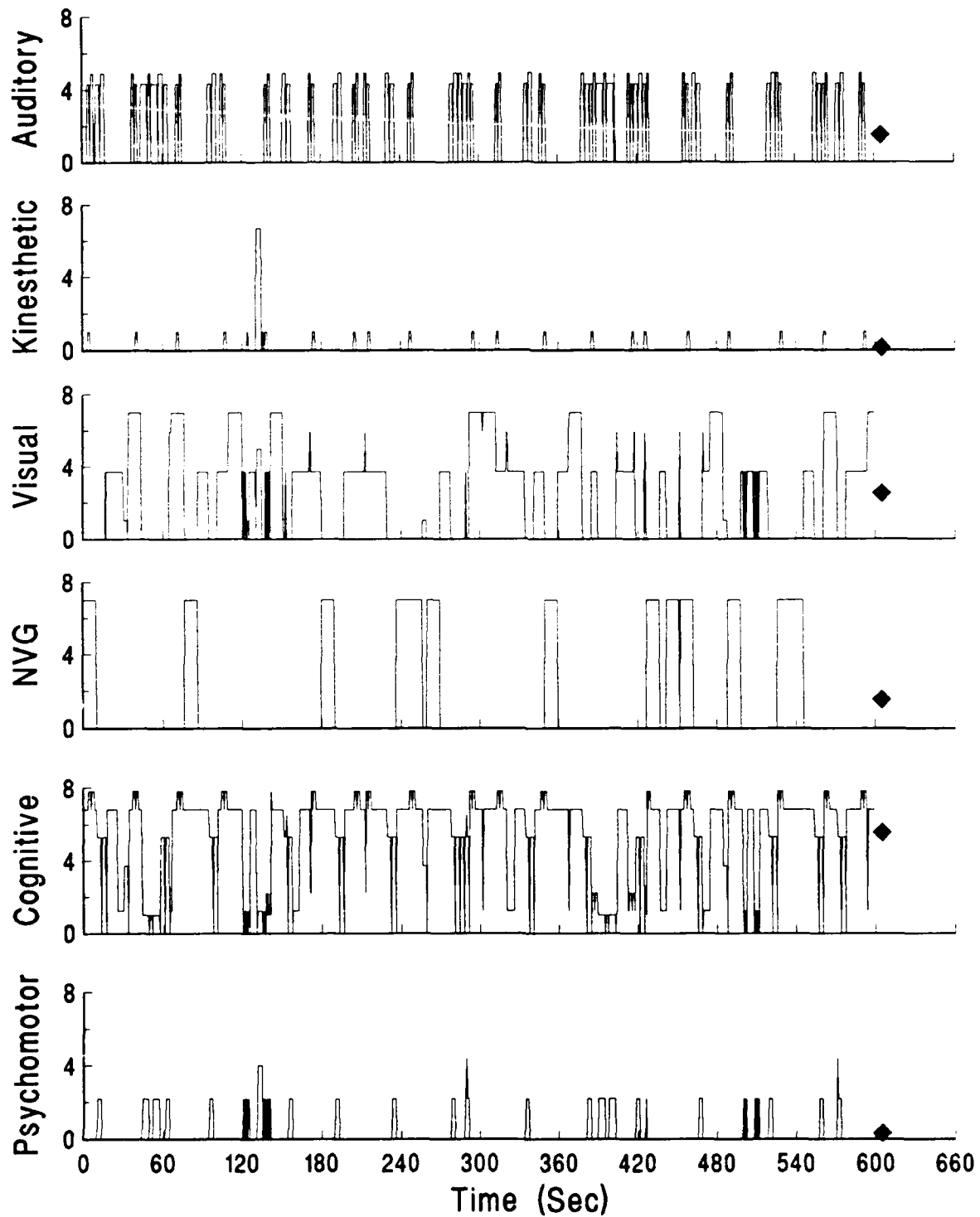
Segment 04: Enroute Flight
Copilot - MH-60K



Segment 05: Contour Flight (No Update) [ANVIS]
Copilot - MH-60K

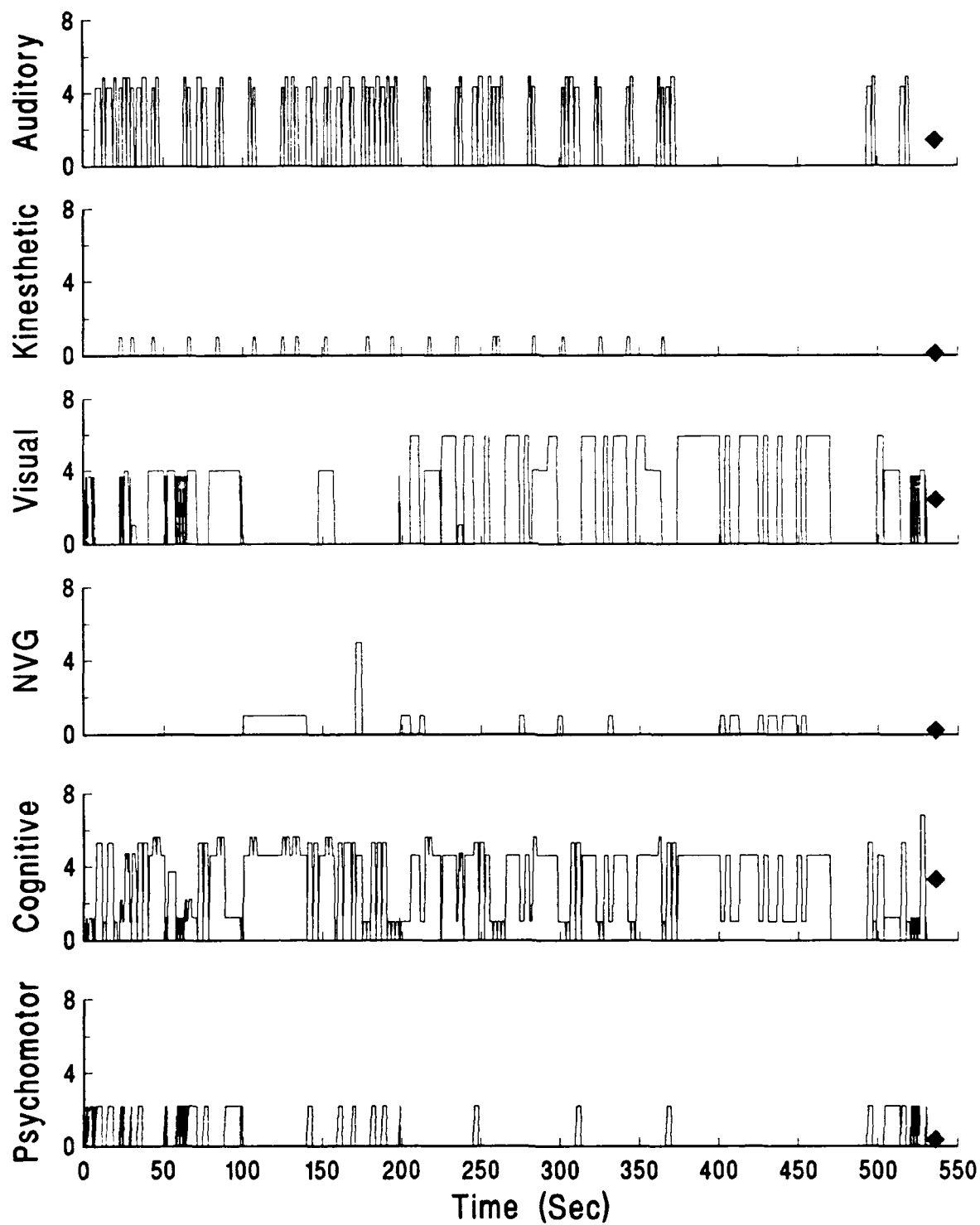


Segment 06: Contour Flight (Update) [ANVIS]
Copilot - MH-60K



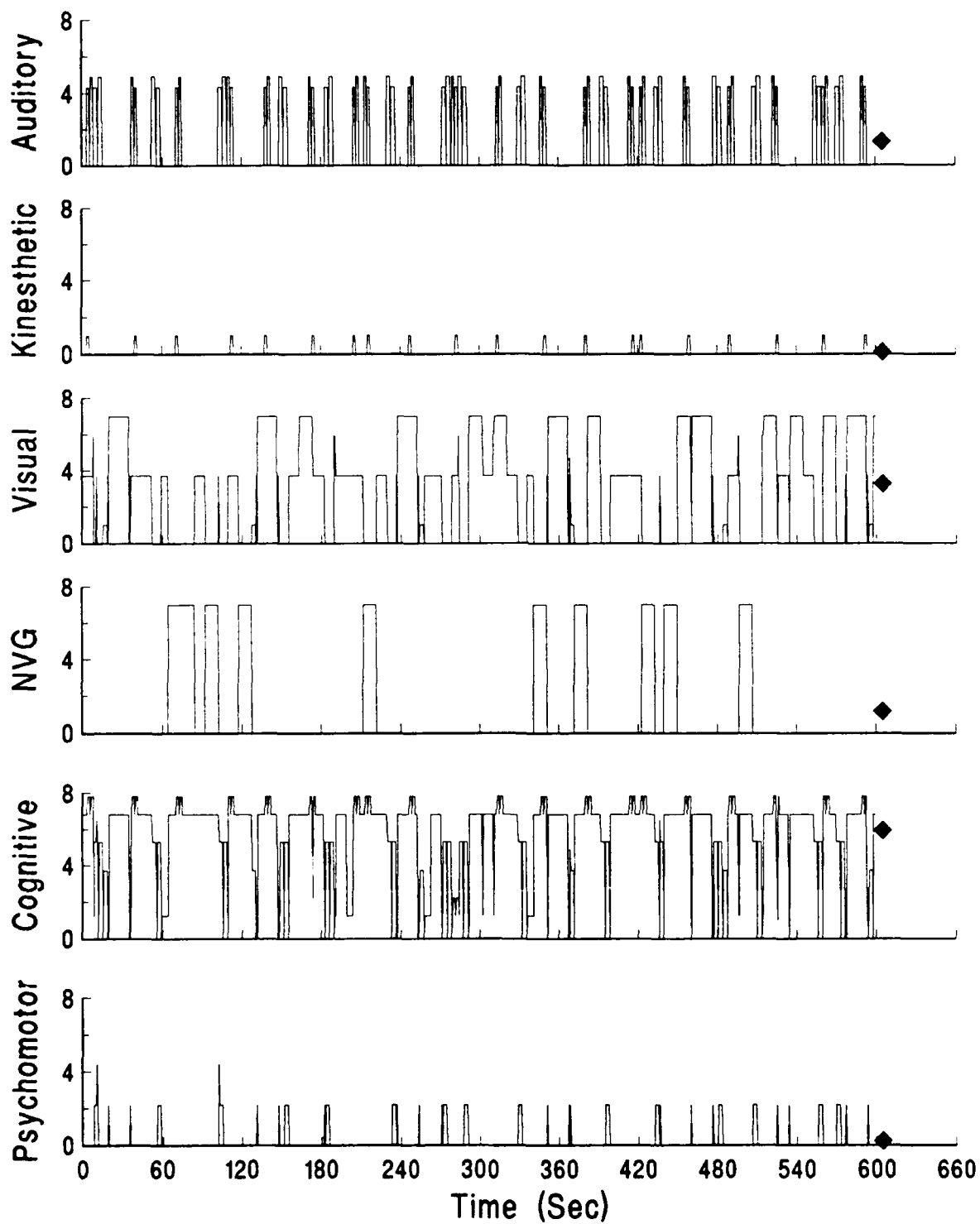
Segment 07: Rendezvous [ANVIS]

Copilot - MH-60K



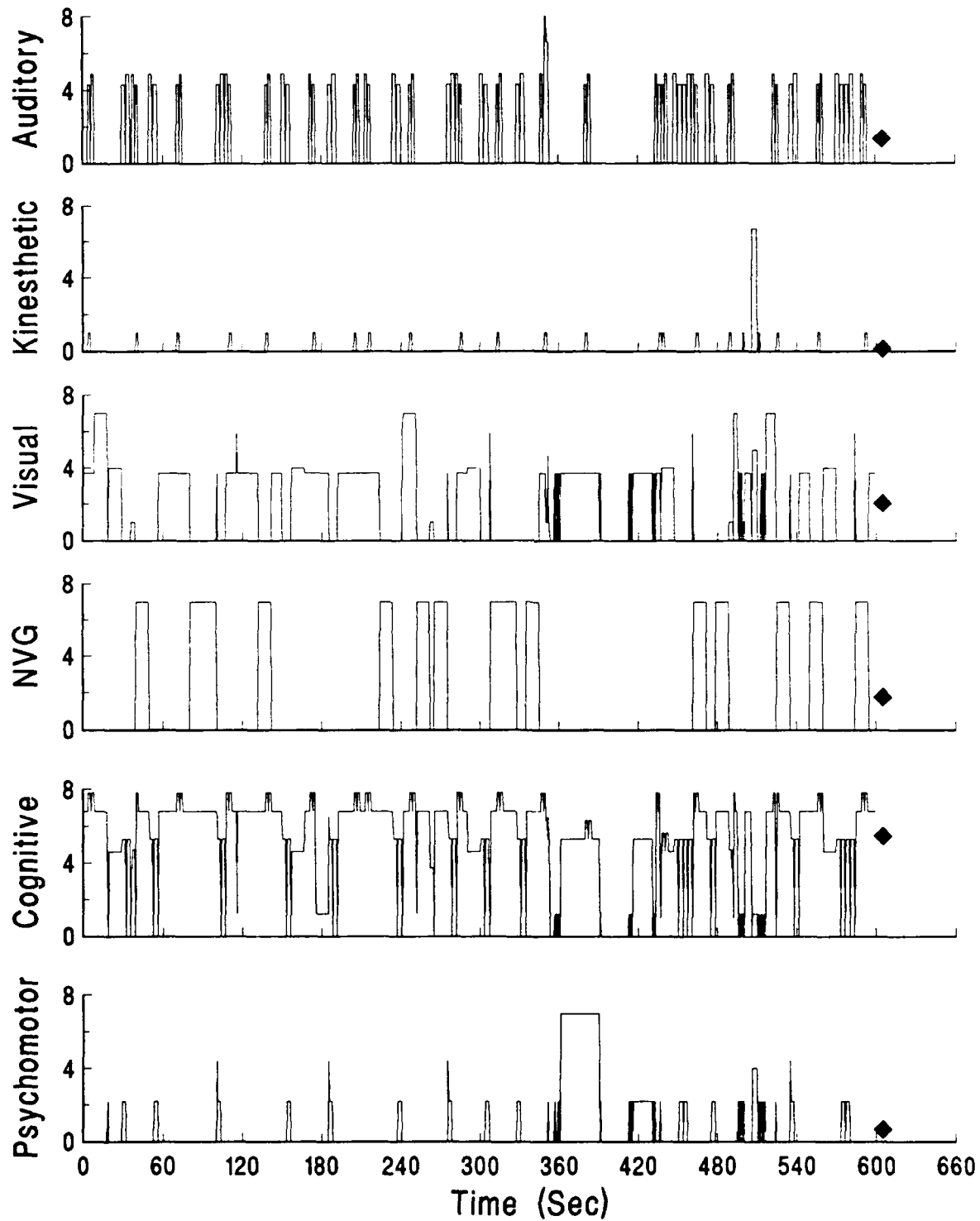
Segment 08: NOE Flight [ANVIS]

Copilot - MH-60K



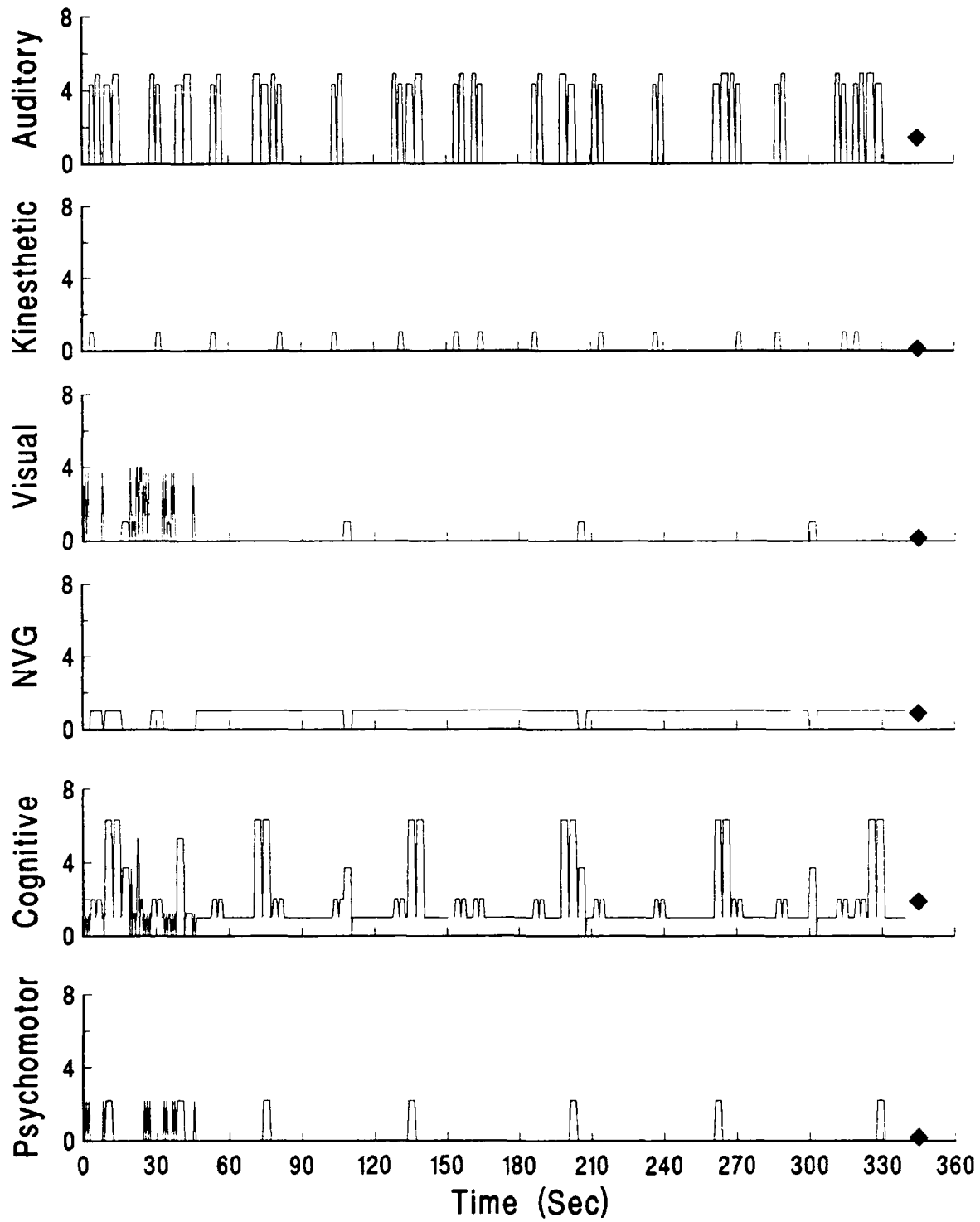
Segment 09: NOE Flight [ANVIS/ASE]

Copilot - MH-60K

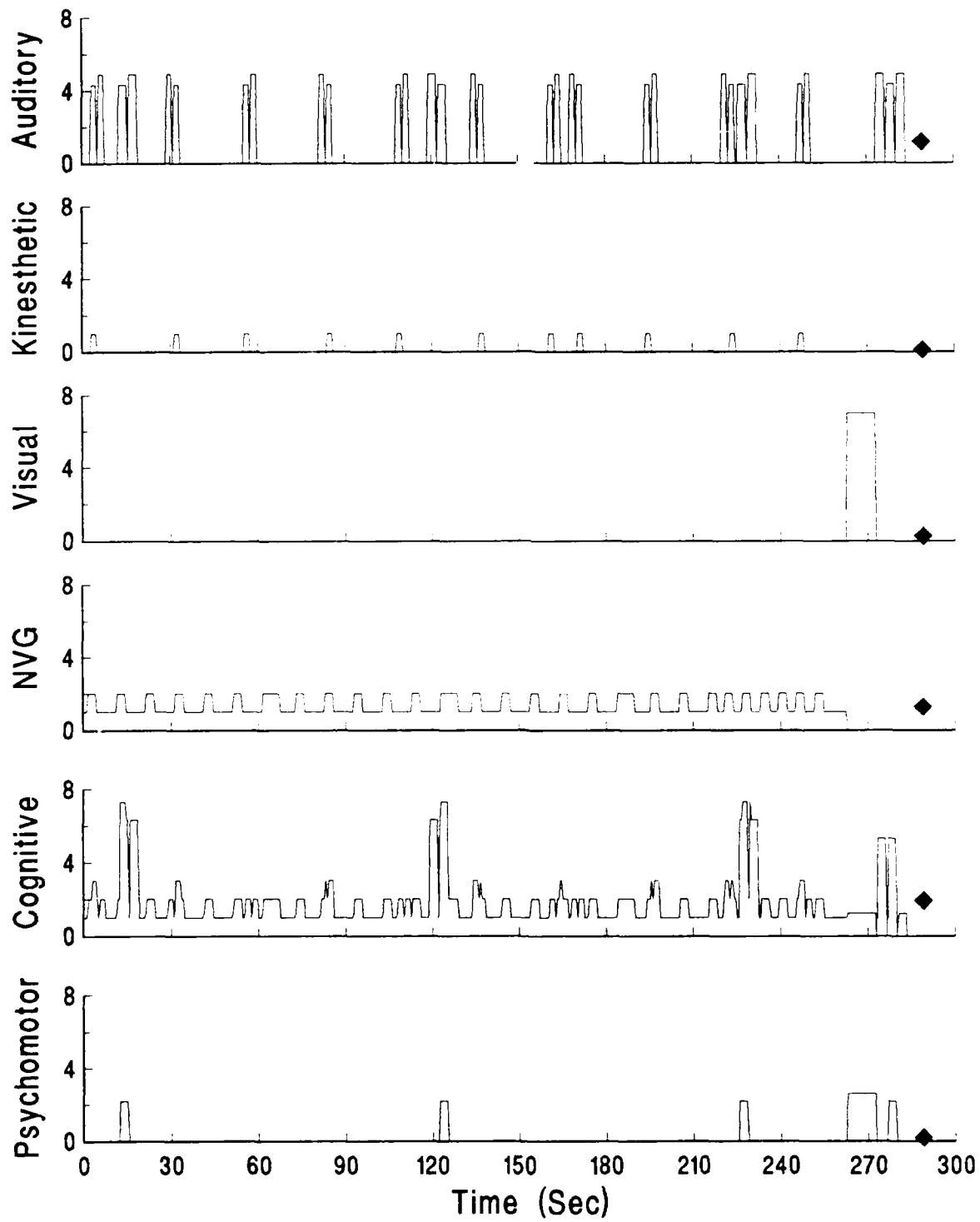


Segment 10: Approach (LZ) [ANVIS]

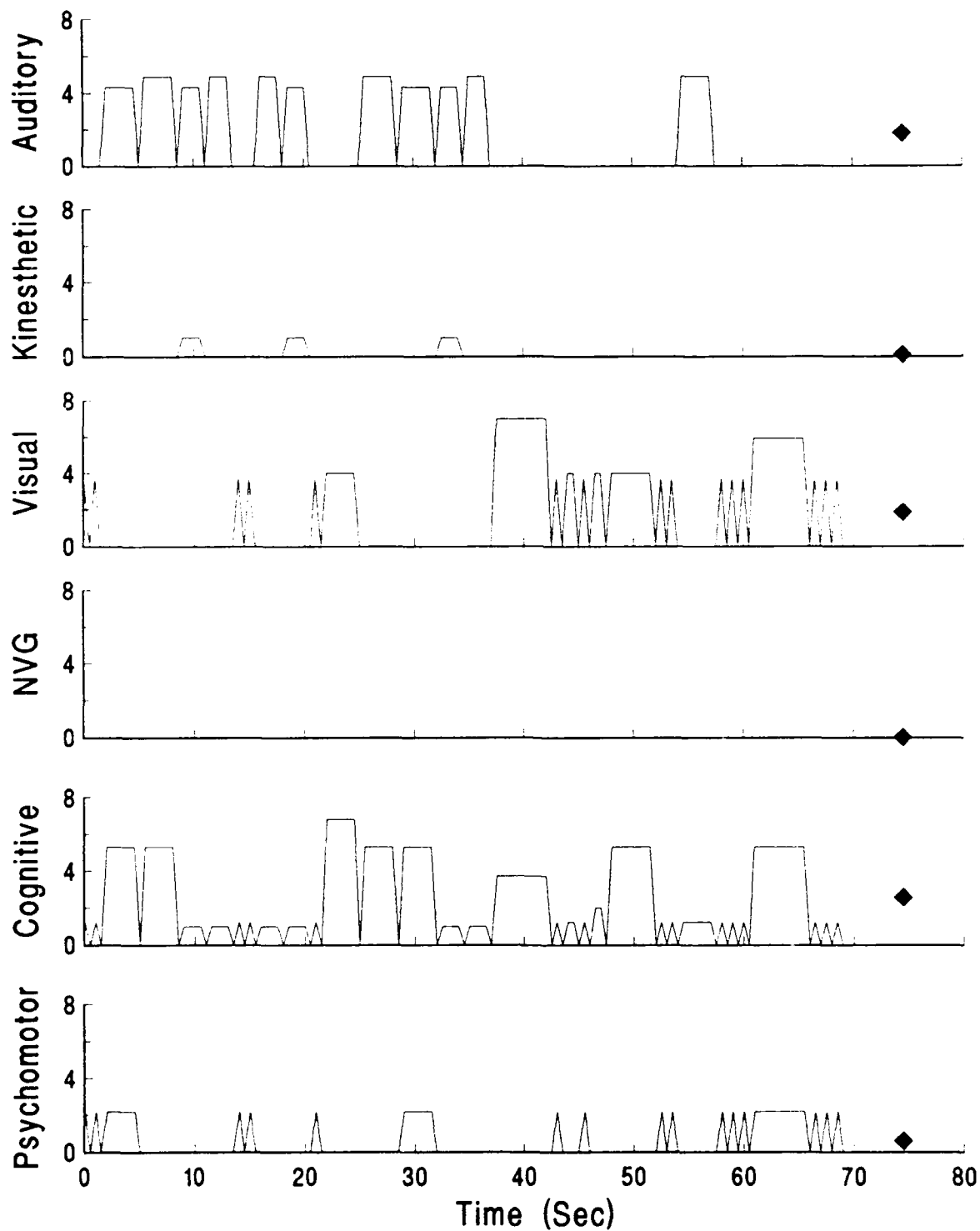
Copilot - MH-60K



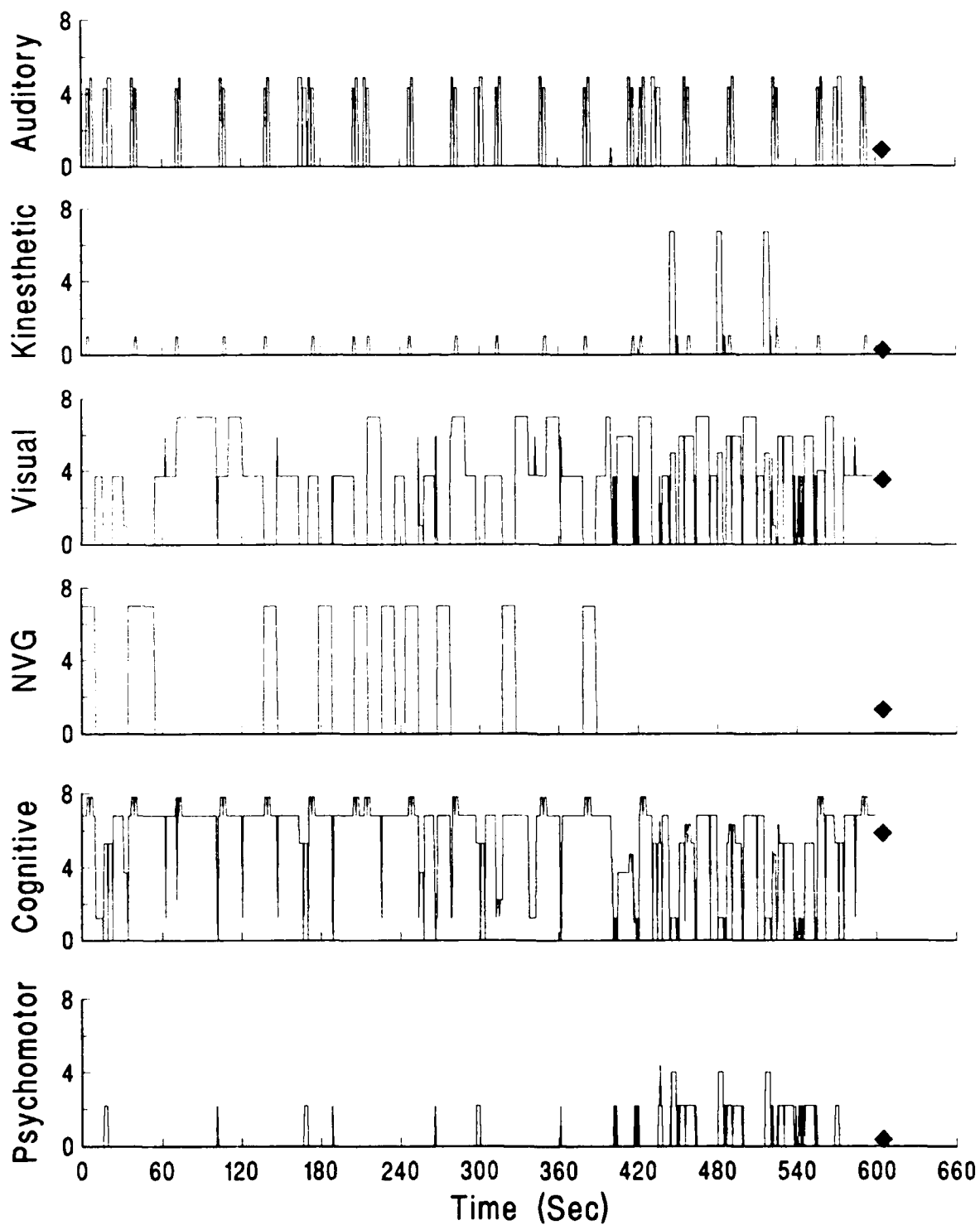
Segment 11: Landing (LZ/Internal Load) [ANVIS]
Copilot - MH-60K



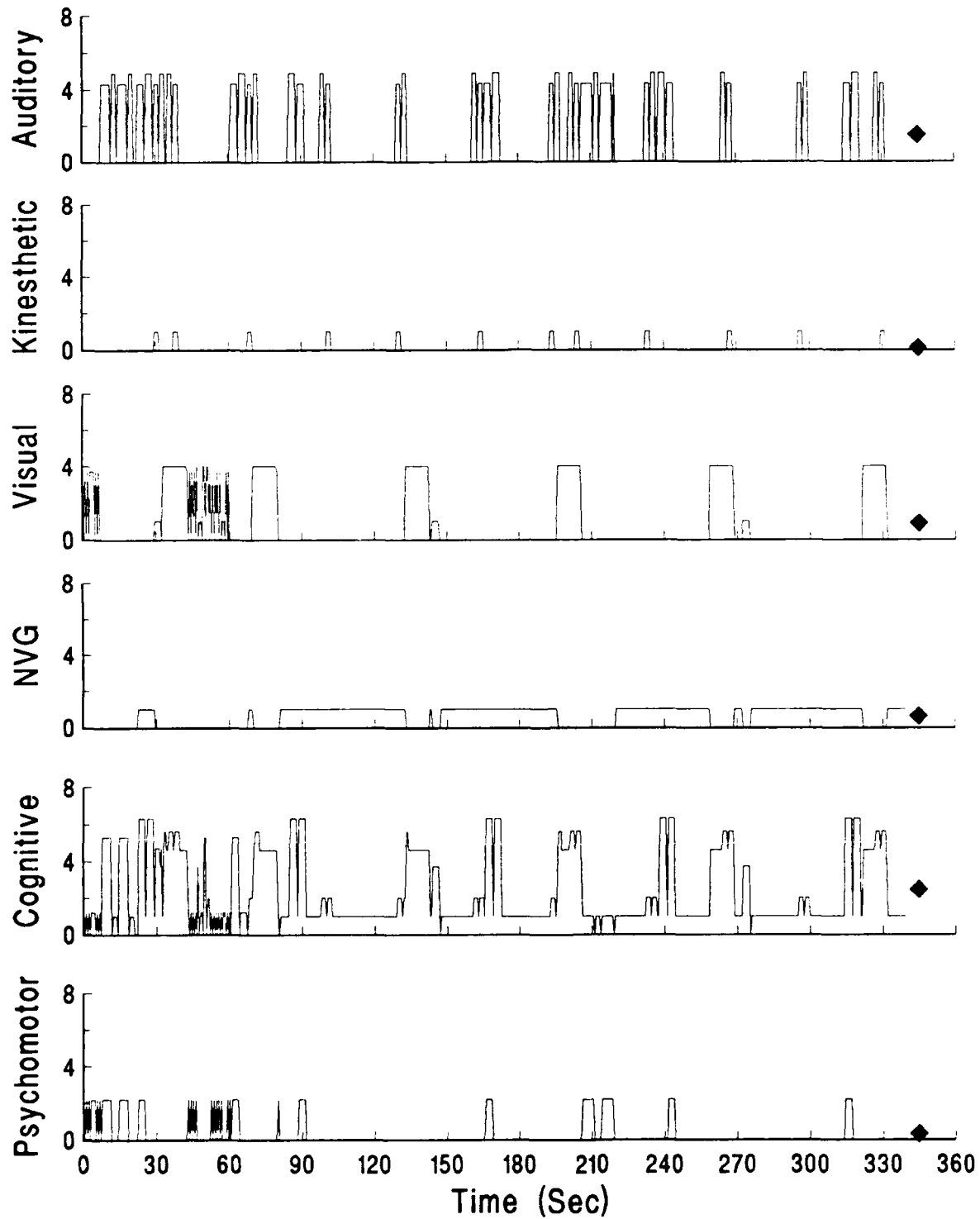
Segment 12: Before Takeoff (LZ)
Copilot - MH-60K



Segment 13: NOE Flight (Route Change) [ANVIS]
Copilot - MH-60K

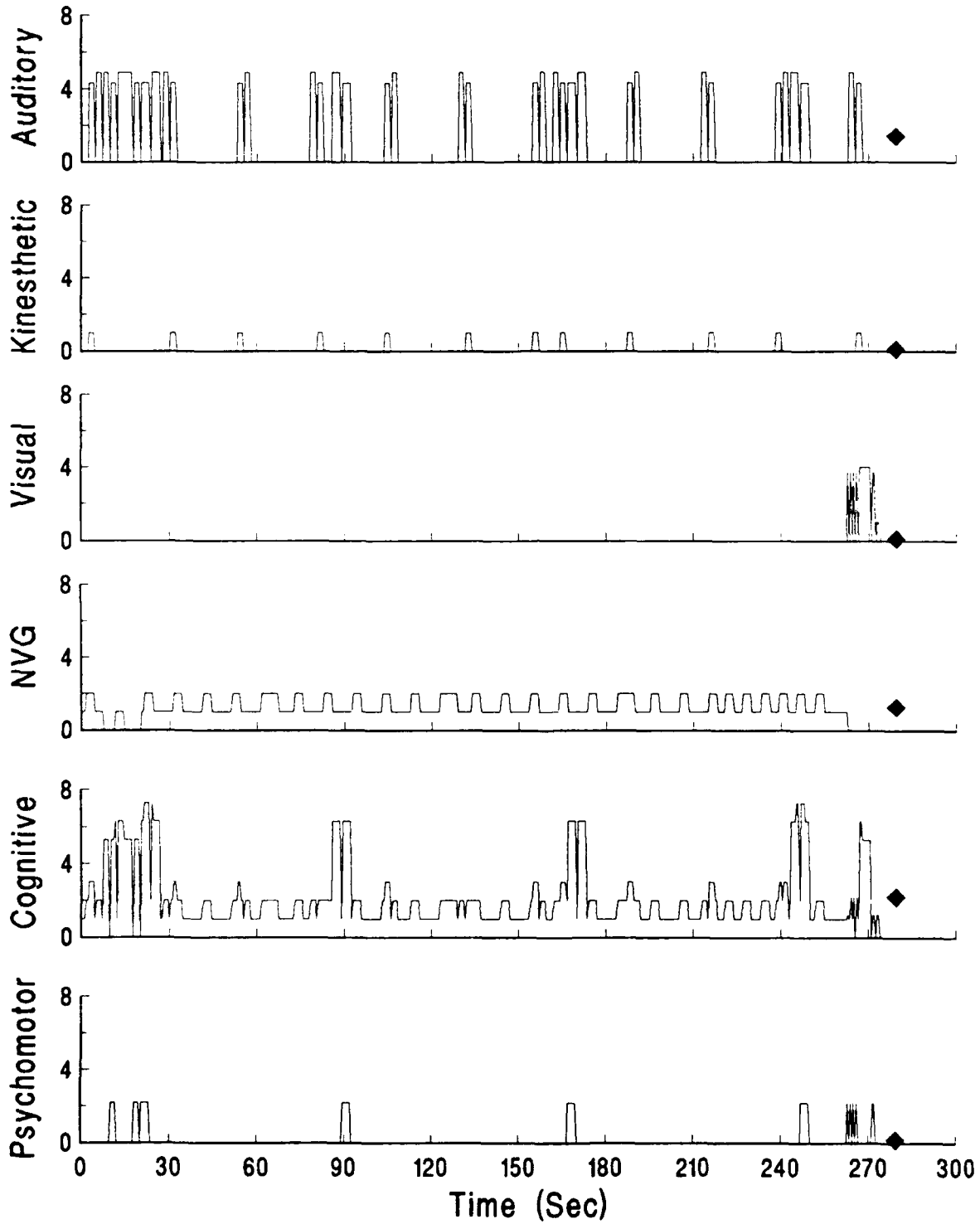


Segment 14: Approach [ANVIS]
Copilot - MH-60K



Segment 15: Landing [ANVIS]

Copilot - MH-60K



A P P E N D I X N

COMPARISON OF MH-60K AND UH-60A SEGMENT AND FUNCTION LISTS

This appendix contains a list of MH-60K and UH-60A segments and functions for comparison. The MH-60K segments and functions are listed in the first column; the comparable UH-60A segments and functions are listed in the second column. Comparable functions are listed side by side. When no comparable function exists, the column is left blank. Functions added for the MH-60K are indicated by an asterisk.

MH-60K	UH-60A
<p>DEPARTURE (BASE)</p> <p>1--Configure Systems for Mission</p> <ul style="list-style-type: none"> *Load Mission Plan *Align Navigation Systems *Check Avionics System *Check Map Display System (Pilot) *Check Map Display System (Copilot) *Configure Flight Director *Configure Navigation Radios *Set up Communication Radios Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Program Transponder *Boresight FLIR Monitor Flight Controls Monitor External Visual Field [NVG] (Pilot) <p>2--Before Takeoff (Base/Internal Load)</p> <ul style="list-style-type: none"> Monitor Flight Controls Perform Before Taxi Check Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Perform Taxi [NVG] Perform Taxiing Check Perform Before Hover Check Perform Hover [NVG] Perform Hover Check [NVG] Land Aircraft [NVG] Load Aircraft (Internal) <p>Perform Before Takeoff Check</p> <p>Perform External Communication (Receive Coordination)</p> <p>Monitor External Visual Field (Pilot) [NVG]</p> <p>3--Takeoff [ANVIS]</p> <ul style="list-style-type: none"> Establish Hover [NVG] Monitor External Visual Field [NVG] (Pilot) Monitor External Visual Field [NVG] (Copilot) Perform Hover [NVG] Establish Climb [NVG] Adjust Climb Parameters [NVG] Check Climb Parameters Establish Level of Flight [NVG] Adjust Level of Flight Parameters [NVG] Check Level of Flight Parameters <p>Monitor Threat (Pilot)</p> <p>Monitor Threat (Copilot)</p> <ul style="list-style-type: none"> Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) 	<p>DEPARTURE (ASSEMBLY AREA)</p> <p>1--Before Takeoff (Assembly Area)</p> <ul style="list-style-type: none"> Monitor Flight Controls <p>Perform Cockpit Communication (Copilot) (Normal)</p> <p>Perform Cockpit Communication (Pilot) (Normal)</p> <p>Perform Cockpit Communication (Copilot)</p> <p>Perform Cockpit Communication (Pilot)</p> <p>Program Doppler</p> <p>Program Transponder</p> <p>Perform Before Takeoff Check</p> <p>Perform External Communication</p> <p>Monitor External Visual Field (Pilot)</p> <p>3--Takeoff [NVG]</p> <ul style="list-style-type: none"> Establish Hover [NVG] Monitor External Visual Field (Pilot) Monitor External Visual Field (Copilot) Perform Hover Establish Climb [NVG] Adjust Climb Parameters [NVG] Check Climb Parameters Establish Level of Flight [NVG] Adjust Level of Flight Parameters [NVG] Check Level of Flight Parameters Check Fuel Consumption Parameters Check Aircraft Systems (Pilot) Check Aircraft Systems (Copilot) Monitor Threat (Pilot) Monitor Threat (Copilot) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot)

*Function added for MH-60K

MH-60K	UH-60A
<p>7--Rendezvous [ANVIS] Monitor Threat (Pilot) Monitor Threat (Copilot) Perform External Communication (Frequency Change) *Perform Rendezvous Check *Perform IFF Procedures *Perform Rendezvous [NVG] *Perform Aerial Refueling [NVG] *Depart Rendezvous [NVG] Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) *Monitor FLIR Image (Pilot) *Monitor FLIR Image (Copilot) Adjust Level of Flight Parameters [NVG] Check Flight Parameters Monitor External Visual Field (Pilot) [NVG]</p> <p>ENROUTE (RENDEZVOUS-LZ)</p> <p>8--NOE Flight [ANVIS] Adjust Flight Parameters [NVG] Check Flight Parameters *Adjust Map Display (Copilot) Perform Navigation [NVG] *Perform Navigation (RADAR) Monitor Threat (Pilot) Monitor Threat (Copilot)</p> <p>Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor External Visual Field (Pilot) [NVG]</p>	<p>**FARP OPERATIONS</p> <p>33--FARP Procedures [NVG] Perform Taxi [NVG] Refuel Aircraft Perform Before Taxi Check (FARP) Perform Taxi [NVG] Monitor Flight Control Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG]</p> <p>ENROUTE (PZ-LZ)</p> <p>20--NOE Flight [NVG] Adjust Flight Parameters [NVG] Check Flight Parameters</p> <p>Perform Navigation [NVG]</p> <p>Monitor Threat (Pilot) Monitor Threat (Copilot) Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot) Compute Fuel Burn Rate Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG]</p>

*Function added for MH-60K

**The segments for Approach, Landing, Before Takeoff (FARP), and Takeoff (FARP) are required before and after FARP operations.

MH-60K	UH-60A
<p>ENROUTE (RENDEZVOUS-LZ) [Continued]</p> <p>9--NOE Flight [ANVIS/ASE] Adjust Flight Parameters [NVG] Check Flight Parameters *Adjust Map Display (Copilot) Perform Navigation [NVG] Monitor Threat (Pilot) Monitor Threat (Copilot) Monitor RADAR Image (Copilot) Respond to Threat [NVG] *Update Navigation (FLIR) *Perform External Communication (ATHS)</p> <p>Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor External Visual Field (Pilot) [NVG]</p> <p>10--Approach (LZ) [ANVIS] Perform Before Landing Check (LZ) Establish Approach [NVG] Adjust Approach Parameters [NVG] Check Approach Parameters Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor Threat (Pilot) Monitor Threat (Copilot)</p> <p>Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG]</p> <p>11--Landing (LZ Internal Load) [ANVIS] Establish Hover [NVG] Perform Hover [NVG] Land Aircraft [NVG] Unload Aircraft (Internal) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG] Monitor Flight Controls</p>	<p>ENROUTE (PZ-LZ) [Continued]</p> <p>22--NOE Flight (Threat) [NVG] Adjust Flight Parameters [NVG] Check Flight Parameters</p> <p>Perform Navigation [NVG] Monitor Threat (Pilot) Monitor Threat (Copilot)</p> <p>Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot) Compute Fuel Burn Rate Perform External Communication (Threat) Respond to Threat [NVG] Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot)</p> <p>26--Approach (LZ) [NVG] Perform Before Landing Check (LZ) Establish Approach [NVG] Adjust Approach Parameters [NVG] Check Approach Parameters Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor Threat (Pilot) Monitor Threat (Copilot) Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG]</p> <p>28--Landing (LZ Internal Load) [NVG] Establish Hover [NVG] Perform Hover [NVG] Land Aircraft [NVG] Unload Aircraft (Internal) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG] Monitor Flight Controls</p>

*Function added for MH-60K

MH-60K	UH-60A
<p>ENROUTE (LZ-RENDEZVOUS)</p> <p>12--Before Takeoff (LZ) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Perform Before Takeoff Check (LZ) Update Navigation (LZ) Monitor External Visual Field (Pilot) [NVG] Monitor Flight Controls</p> <p>3--Takeoff [ANVIS] Establish Hover [NVG] Monitor External Visual Field [NVG] (Pilot) Perform Hover [NVG] Establish Climb [NVG] Monitor External Visual Field [NVG] (Copilot) Adjust Climb Parameters [NVG] Check Climb Parameters Establish Level of Flight [NVG] Adjust Level of Flight Parameters [NVG] Check Level of Flight Parameters</p> <p>Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination)</p> <p>Monitor Threat (Pilot) Monitor Threat (Copilot)</p> <p>13--NOE Flight (Route Change) [ANVIS] Adjust Flight Parameters [NVG] Check Flight Parameters *Adjust Map Display (Copilot) Perform Navigation [NVG] Monitor Threat (Pilot) Monitor Threat (Copilot)</p> <p>Mission Change Update Navigation (Mission Change) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor External Visual Field (Pilot) [NVG]</p>	<p>ENROUTE (LZ-PZ or (LZ-FARP)</p> <p>31--Before Takeoff (LZ) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Perform Before Takeoff Check (Fly Through) Update Doppler (PZ) Monitor External Visual Field (Pilot) Monitor Flight Controls</p> <p>3--Takeoff [NVG] Establish Hover [NVG]</p> <p>Perform Hover Establish Climb [NVG]</p> <p>Adjust Climb Parameters [NVG] Check Climb Parameters Establish Level of Flight [NVG] Adjust Level of Flight Parameters [NVG] Check Level of Flight Parameters Check Fuel Consumption Parameters Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Check Aircraft Systems (Pilot) Check Aircraft Systems (Copilot) Monitor Threat (Pilot) Monitor Threat (Copilot) Monitor External Visual Field (Pilot) Monitor External Visual Field (Copilot)</p> <p>24--NOE Flight (Mission Change) [NVG] Adjust Flight Parameters [NVG] Check Flight Parameters</p> <p>Perform Navigation [NVG] Monitor Threat (Pilot) Monitor Threat (Copilot) Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot) Compute Fuel Burn Rate Mission Change Update Doppler (Mission Change) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG]</p>

*Function added for MH-60K

MH-60K	UH-60A
<p>ENROUTE (LZ-RENDEZVOUS) [Continued]</p> <p>7--Rendezvous [ANVIS] Monitor Threat (Pilot) Monitor Threat (Copilot) Perform External Communication (Frequency Change) *Perform Rendezvous Check *Perform Rendezvous [NVG] *Perform IFF Procedures *Perform Aerial Refueling [NVG] *Depart Rendezvous [NVG] Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) *Monitor FLIR Image (Pilot) *Monitor FLIR Image (Copilot) Adjust Level of Flight Parameters [NVG] Check Flight Parameters Monitor External Visual Field (Pilot) [NVG]</p> <p>ENROUTE (RENDEZVOUS-BASE)</p> <p>6--Contour Flight (Update) [ANVIS] Adjust Flight Parameters [NVG] Check Flight Parameters *Adjust Map Display (Copilot) Perform Navigation [NVG] Monitor Threat (Pilot) Monitor Threat (Copilot) *Monitor RADAR Image (Pilot) *Monitor FLIR Image (Pilot) *Update Navigation (FLIR) *Update Navigation (NRP)</p> <p>Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Perform External Communication (Transmit Code) Monitor External Visual Field [NVG] (Pilot)</p>	<p>**FARP OPERATIONS</p> <p>33--FARP Procedures [NVG] Perform Taxi [NVG] Refuel Aircraft Perform Before Taxi Check (FARP) Perform Taxi [NVG] Monitor Flight Control Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG]</p> <p>ENROUTE (AA-PZ)</p> <p>5--Contour Flight [NVG] Adjust Flight Parameters [NVG] Check Flight Parameters</p> <p>Perform Navigation [NVG] Monitor Threat (Pilot) Monitor Threat (Copilot)</p> <p>Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot) Compute Fuel Burn Rate Update Doppler (Landmark) [NVG] Update Doppler (Stored Destination) [NVG] Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Perform External Communication (Transmit Code) Monitor External Visual Field [NVG] (Pilot)</p>

*Function added for MH-60K

**The segments for Approach, Landing, Before Takeoff (FARP), and Takeoff (FARP) are required before and after FARP operations.

MH-60K	UH-60A
<p>ENROUTE (RENDEZVOUS-BASE) [Continued]</p> <p>14--Approach [ANVIS] Perform External Communication (Frequency Change) Perform Before Landing Check Establish Approach [NVG] Adjust Approach Parameters [NVG] Check Approach Parameters Monitor External Visual Field (Copilot) [NVG] *Monitor FLIR Image (Copilot) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination)</p> <p>Perform External Communication (Transmit Code) Monitor Threat (Pilot) Monitor Threat (Copilot) Monitor External Visual Field (Pilot) [NVG]</p> <p>15--Landing [ANVIS] Establish Hover [NVG] Perform Hover [NVG] Monitor External Visual Field (Copilot) [NVG] Land Aircraft [NVG] Perform After Landing Check Perform External Communication (Receive Coordination) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor External Visual Field (Pilot) [NVG] Monitor Flight Controls</p>	<p>ENROUTE (AA-PZ) [Continued]</p> <p>11--Approach [NVG] Perform External Communication Perform Before Landing Check Establish Approach [NVG] Adjust Approach Parameters [NVG] Check Approach Parameters</p> <p>Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot)</p> <p>Monitor Threat (Pilot) Monitor Threat (Copilot) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG]</p> <p>13--Landing [NVG] Establish Hover [NVG] Perform Hover [NVG] Monitor External Visual Field (Copilot) [NVG] Land Aircraft [NVG] Perform After Landing Check Perform External Communication Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) ((Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG] Monitor Flight Controls</p>

*Function added for MH-60K

MH-60K	UH-60A
<p>ENROUTE (RENDEZVOUS-BASE) [Continued]</p> <p>14--Approach [ANVIS] Perform External Communication (Frequency Change) Perform Before Landing Check Establish Approach [NVG] Adjust Approach Parameters [NVG] Check Approach Parameters Monitor External Visual Field (Copilot) [NVG] *Monitor FLIR Image (Copilot) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination)</p> <p>Perform External Communication (Transmit Code) Monitor Threat (Pilot) Monitor Threat (Copilot) Monitor External Visual Field (Pilot) [NVG]</p> <p>15--Landing [ANVIS] Establish Hover [NVG] Perform Hover [NVG] Monitor External Visual Field (Copilot) [NVG] Land Aircraft [NVG] Perform After Landing Check Perform External Communication (Receive Coordination) Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) (Coordination) Perform Cockpit Communication (Pilot) (Coordination) Monitor External Visual Field (Pilot) [NVG] Monitor Flight Controls</p>	<p>ENROUTE (AA-PZ) [Continued]</p> <p>11--Approach [NVG] Perform External Communication Perform Before Landing Check Establish Approach [NVG] Adjust Approach Parameters [NVG] Check Approach Parameters</p> <p>Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) (Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Check Aircraft Systems (Copilot) Check Aircraft Systems (Pilot)</p> <p>Monitor Threat (Pilot) Monitor Threat (Copilot) Monitor External Visual Field (Pilot) [NVG] Monitor External Visual Field (Copilot) [NVG]</p> <p>13--Landing [NVG] Establish Hover [NVG] Perform Hover [NVG] Monitor External Visual Field (Copilot) [NVG] Land Aircraft [NVG] Perform After Landing Check Perform External Communication Perform Cockpit Communication (Copilot) (Normal) Perform Cockpit Communication (Pilot) ((Normal) Perform Cockpit Communication (Copilot) Perform Cockpit Communication (Pilot) Monitor External Visual Field (Pilot) [NVG] Monitor Flight Controls</p>

*Function added for MH-60K